

# International Trade: Syllabus

Economics 101 — Summer II 2022

August 1, 2022

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Class Time (85475): TueThu 8:00a-10:50a  
Classroom: Solis 110  
Course Web Page: [econ.ucsd.edu/muendler/teach/22x/101](http://econ.ucsd.edu/muendler/teach/22x/101)  
Midterm review: August 17, 5-6:50p: Zoom ID to be announced on [Canvas](#)  
Midterm exam: August 18, 8am (50 minutes, no class afterwards)  
Final review: September 1, 7-8:50p: Zoom ID to be announced on [Canvas](#)  
Final exam: September 3, 8am (100 minutes)

## 1 Course Objectives

This course examines both theory of international trade in goods and services and empirics. The course analyzes the consequences of trade for country-wide welfare and the distribution of incomes. The course presents the principle of comparative advantage and its application to classical and modern trade theory. Focusing on the long-term effects of international economic integration, the course discusses the economic effects of trade, as well as trade barriers, on industrial competitiveness, the income distribution, growth and welfare.

Part I of the course is dedicated to classic trade theory in a general equilibrium setting under perfect competition and explains trade between different countries at the industry level. The many-industry version of the corner-stone technology-based trade model implies the so-called Gravity Equation of Trade—a powerful empirical tool to analyze, predict and simulate international trade flows. Part II of the class presents recent advances in trade theory under imperfect competition and with heterogeneous firms; it explains trade between similar countries and the formation of multinational enterprises. These theoretical approaches also give rise to the Gravity Equation of Trade.

## 2 Prerequisites

Econ 100B or 102.

## 3 Format

The course will be taught in hybrid format, but all **exams** will be **in-person** by default.

You can follow the course material in three ways:

- In-person: Be physically present in the classroom so you can actively participate during lecture in the classroom, ask questions, and talk to the instructor in person before or after lecture;
- Synchronous-remote: Follow a live stream of the lecture, communicate with the instructor by Zoom audio (unmuting yourself), and communicate with classmates using the Zoom chat (the Zoom chat will not be moderated);
- Asynchronous-remote: Follow a Podcast/Zoom recording of lecture, but forego the opportunity to ask live questions.

You can always opt to follow any particular lecture synchronous-remotely or asynchronous-remotely, while attending in-person in general.

You must follow campus safety requirements and, if policy requires it, wear a mask in the lecture hall at all times. The instructor and teaching assistant will wear a mask before and after lecture or section, and when necessary during lecture or section, and maintain proper physical distancing at all times. For the current UC San Diego campus safety policy, please see [returntolearn.ucsd.edu](https://returntolearn.ucsd.edu).

The format of the exam review sections depends on room availability as well as podcast and Zoom capabilities; the default is in-person.

There is one midterm exams and one final exam. Both exams will be administered in-person. If you cannot attend the midterm exam for a reason beyond your control, you will be excused from the midterm and the scores on the final exam will be scaled by a factor of 1.5, which proportionally compensates you for the foregone points. If you cannot attend the final exam for a reason beyond your control, the default is to leave the course with an incomplete grade and that you sit for a make-up final exam in fall quarter.

## 4 Readings and Podcasts

Electronic lecture slides become available online on the [course web page](#) and on [Canvas](#) before each class. An effective way to follow the course material can be to use the posted lecture slides for note taking. Key graphs are left empty for you to complete during lecture or asynchronously using the Podcast/Zoom recording. On August 16 (Tue), complete lecture notes (with overlay graphs) will become available for lectures 1 through 10 prior to the midterm, and on September 1 (Thu) for lectures 11 through 18 prior to the final exam.

**Textbook (required):** [Krugman, Obstfeld and Melitz \(2018\)](#);

**Textbook supplement (required):** [Muendler \(2020\)](#)/Ch. 1 through 4 and 6.

The textbook is available under RedShelf Inclusive Access through the UC San Diego bookstore.

The textbook is available under the RedShelf Inclusive Access program. These digital course materials are provided through the UC San Diego Bookstore via [Canvas](#) and are free for the first week of class. **Note:** Your student account **will be charged** \$29.18 after Saturday, August 6, 2022 **unless you opt out** through [Canvas](#).

Concretely, if you decide to opt-out, you must complete the following process by Saturday, August 6, 2022 (you will then be responsible for sourcing the materials elsewhere):

- Click the RedShelf link in [Canvas](#) under Modules/textbooks;
- Click View Course Materials;
- Scroll down to the gray opt-out button and follow the prompts;
- Look out for an email from [donotreply@redshelf.com](mailto:donotreply@redshelf.com) and check the spam folder if you don't receive it.

For any questions about billing please contact [textbooks@ucsd.edu](mailto:textbooks@ucsd.edu). For any questions about using your eBook please reference [RedShelf Solve](#).

The textbook supplement consists of select chapters from the textbook draft of [Muendler \(2020, Ch. 1 through 4 and 6\)](#) and is available for download from the [course web page](#) and [Canvas](#). Further textbook supplements may or may not become available throughout the quarter. The supplements are zipped and password protected. The password is given out on the first day in class.

The lectures will become available, as held, in the form of [Podcasts](#) and as Zoom recordings.

To help you review material and assess your own understanding, for many lectures a Question of the Day will be posted online ([course web page](#) and [Canvas](#)) alongside the lecture slides. The questions of the day are not graded. It is recommended that you work in groups and come to see the instructor or the teaching assistant during office hours to review your answers.

## 5 Software

Please install the software package Stata/SE 17 on a suitable computer and have the computer next to you during class, so you can actively follow the coding portion of lecture. You can download Stata/SE 17 and the license file from the campus provided links on Canvas. To update your version to the most recent release, launch Stata/SE 17 and type *update all*.

To obtain Stata 17, please request access for the course following the instructions at [blink UC San Diego](#) and use the license available at the respective [Canvas link](#).

## 6 Empirical Exercises

There are four short assigned empirical exercises. The exercises ask you to implement statistical approaches from class, using Stata/SE 17. You receive readily prepared global data sets for this purpose at [econweb.ucsd.edu/muendler/teach/22x/101](http://econweb.ucsd.edu/muendler/teach/22x/101), as well as starting Stata code.

There are two deliverables for each empirical exercise: (i) a file with results in the form of figures or tables (pdf preferred), and (ii) your Stata code. While it is acceptable that you exchange ideas with your classmates, you must deliver **your own code file and results**.

For the first empirical exercise (out on August 4), you have more than one week to complete it, until Friday, 4:50pm of the following week (August 12). For the next three empirical exercises, you have half a week (including a weekend) to complete them (second exercise out on August 11 and due on Monday, August 15, 4:50pm; third exercise out on August 18 and due on Monday, August 22, 4:50pm; fourth exercise out on August 25 and due on Monday, August 29, 4:50pm).

Please **upload** the pdf file with results and the Stata do file to [Canvas](#). Each empirical exercise is worth 10 points, the equivalent of one exam question.

**No empirical exercise will be accepted after the respective due time for upload** (at 5:00p after a ten-minute grace period).

## 7 Overall Assessment

There will be one midterm exams and one final exam. The midterm exam will take 50 minutes and the final exam will take 100 minutes (no extra time). The final exam is cumulative. The midterm exam contains five 10-minute questions, the final exam contains ten 10-minute questions.

At the end of the first week of instruction, on Friday, August 5 (when verification of commencement of academic activity for federal financial aid is also due), you are asked to comment on your experience. You

must post before seeing posts made by peers. You can earn points for posting and points for replying or giving feedback to one other post that was posted by your peers. You must post before seeing replies.

Your final raw score will be your total points from the two exams, the discussion participation, and the four empirical exercises:

First-week discussion:	5 points (3+2 points)	August 6
Empirical exercises:	40 points (10 points each)	August 12, 15, 22 and 29
Midterm (50 minutes):	50 points	August 18
Final (100 minutes):	100 points	Finals day, September 3
<i>Total:</i>	195 points	

Your final *letter grade* will be inferred from the typical grade distribution (curve) in *economics* classes at UC San Diego. You can find this grade distribution on the [course web page](#). The difficulty or simplicity of empirical exercises and exams will therefore not matter, whereas your relative performance in comparison to your classmates will determine your letter grade. However, grades of *D* or *F* will not depend on the curve but on a minimal performance standard.

There are two scheduled review sections, one prior to the midterm exam and one prior to the final exam, to help you prepare for the exams.

During exams, only a pen, a pencil, a ruler and an eraser are permitted for use. No other material is allowed, and all other objects must be outside your immediate reach at all times during the exam. **The exams are closed book and closed class materials. You must not use any written resources, especially no online material, and you must not communicate with anyone by any means during the exam.**

Principles of academic honesty are strictly applied. Regardless of any potential additional sanction from the academic integrity office, or the absence of an additional sanction, the exam score will be zero if there is an exam rule violation. The complete UC San Diego Policy on Integrity of Scholarship can be viewed at the [Senate web page](#). On each exam, you are required to sign a personal pledge of academic integrity.

Appeals of scores on exams must be submitted in writing. Following the appeal, all questions on all exams and problem sets on record will be reconsidered. An appeal may be denied if the exam was written with a pencil and not scanned.

## 8 Academic Integrity

Students are expected to honor the highest standards of academic integrity, and principles of academic honesty are strictly enforced. Failure to honor that code will be reported to the office of academic integrity. To review the campus policy, please visit: [students.ucsd.edu/academics/academic-integrity](http://students.ucsd.edu/academics/academic-integrity).

Regardless of any potential additional sanction from the academic integrity office, or the absence of an additional sanction, the exercise or exam score will be zero if there is an exercise or exam rule violation. On each exam, you are required to sign a personal pledge of academic integrity.

The complete UC San Diego Policy on Integrity of Scholarship can be viewed at: [senate.ucsd.edu/Operating-Procedures/Senate-Manual/appendices/2](http://senate.ucsd.edu/Operating-Procedures/Senate-Manual/appendices/2).

## 9 Academic Accommodations

Any student with documented disability in accordance with UC San Diego policy has the right to a special accommodation. Please present the formal request within the first days of class so that the necessary arrangements can be made. Please contact the Economics Undergraduate Advisors with any questions about documentation.

## 10 Non-discrimination and No Harassment

UC San Diego and the Economics Department are committed to creating an environment free from all forms of discrimination and harassment, in which all students are able to learn and openly express themselves.

## 11 Course Schedule

### I. Trade Theory and Empirics at the Industry Level

1. **Tue, August 2:** The Global Division of Labor and Comparative Advantage  
(Krugman, Obstfeld and Melitz 2018/Ch. 1; Muendler 2020/Ch. 1)

2. **Tue, August 2:** Comparative Advantage due to Productivity Differences  
(Krugman, Obstfeld and Melitz 2018/Ch. 3; Muendler 2020/Ch. 2)

3. **Thu, August 4:** Multiple Industries and Trade Costs  
(Muendler 2020/Ch. 3)

4. **Thu, August 4:** The Gravity Equation  
(Krugman, Obstfeld and Melitz 2018/Ch. 2; Muendler 2020/Ch. 3)  
EMPIRICAL EXERCISE 1 OUT

**Fri, August 5:** DISCUSSION OF FIRST WEEK  
#FINAID SURVEY to certify commencement of academic activity for Title IV federal financial aid

**Sat, August 6:** DEADLINE TO DROP out of RedShelf Inclusive Access to textbook through [Canvas](#)

5. **Tue, August 9:** Specific Factors and Endowment Differences  
(Krugman, Obstfeld and Melitz 2018/Ch. 4)

6. **Tue, August 9:** Mobile Factors and Endowment Differences  
(Krugman, Obstfeld and Melitz 2018/Ch. 5; Muendler 2020/Ch. 4)

7. **Thu, August 11:** World Trade Equilibrium and Welfare in Classic Trade Theory  
(Krugman, Obstfeld and Melitz 2018/Ch. 6)

8. **Thu, August 11:** Gravity Equation Estimation and Welfare  
(Muendler 2020/Ch. 3)  
EMPIRICAL EXERCISE 2 OUT

**Fri, August 12, 4:50pm:** EMPIRICAL EXERCISE 1 DUE

**Mon, August 15, 4:50pm:** EMPIRICAL EXERCISE 2 DUE

9. **Tue, August 16:** Distributional Consequences of Classic Trade Theory  
(Krugman, Obstfeld and Melitz 2018/Ch. 4; Muendler 2020/Ch. 4)

10. **Tue, August 16:** Intermediate Goods Trade and Offshoring  
(Krugman, Obstfeld and Melitz 2018/Ch. 8; Muendler 2020/Ch. 6)

**Wed, August 17, 5-6:50p:** *Midterm review section* (location TBA)

**Thu, August 18, 8:00am:** MIDTERM EXAM (50 minutes)  
covering lectures 1 through 10; **Krugman, Obstfeld and Melitz (2018)**/Ch. 1 through 6; **Muendler (2020)**/Ch. 2 through 4 and 6  
EMPIRICAL EXERCISE 3 OUT

**Mon, August 22, 4:50pm:** EMPIRICAL EXERCISE 3 DUE

## II. Trade Theory and Empirics at the Firm and Product Level

**11. Tue, August 23:** Imperfect Competition and Market Segmentation  
(**Krugman, Obstfeld and Melitz 2018**/Ch. 8)

**12. Tue, August 23:** Intra-industry Trade  
(**Krugman, Obstfeld and Melitz 2018**/Ch. 8)

**13. Thu, August 25:** Diverse Firm and Trade  
(**Krugman, Obstfeld and Melitz 2018**/Ch. 8)

**14. Thu, August 25:** Gravity Equation Estimation Revisited  
(**Muendler 2020**/Ch. 3)  
EMPIRICAL EXERCISE 4 OUT

**Mon, August 29, 4:50pm:** EMPIRICAL EXERCISE 4 DUE

**15. Tue, August 30:** Diverse Firm, Trade, and Reallocation  
(**Krugman, Obstfeld and Melitz 2018**/Ch. 8)

**16. Tue, August 30:** Policy Analysis and Gravity Equation Estimation

**17. Thu, September 1:** Multinational Production  
(**Krugman, Obstfeld and Melitz 2018**/Ch. 8)

**18. Thu, September 1:** Globalization, Prosperity, and Equity  
(Optional reading: **Muendler (2018)**)

**Thu, September 1, 7-8:50p:** *Final review section* (location TBA)

**Sat, September 3, 8:00am:** FINAL EXAM (100 minutes)  
covering lectures 1 through 16; **Krugman, Obstfeld and Melitz (2018)**/Ch. 1 through 6 and 8; **Muendler (2020)**/Ch. 2 through 4 and 6

## References

**Krugman, Paul R., Maurice Obstfeld, and Marc J. Melitz.** 2018. *International Economics: Theory and Policy*. . 11th (global) ed., Boston: Pearson.

**Muendler, Marc-Andreas.** 2018. "Außenhandel, Arbeitsmärkte und die globale Verteilung der Einkommen (The Global Distribution of Incomes, International Trade and the Labor Market)." *Wirtschaftsdienst/Economic Review*, 98(13): 50–61. English translation at [econ.ucsd.edu/muendler/download/misc/globalization-inequality.pdf](http://econ.ucsd.edu/muendler/download/misc/globalization-inequality.pdf).

**Muendler, Marc-Andreas.** 2020. "The Economics of Globalization." University of California, San Diego, unpublished textbook manuscript.