

ECON 550 Applied Trade Policy Analysis

Semester: Falll 2025

Units: 4

Time: Tuesday & Thursday 8:00am – 9:50am

Location: DMC 260

Instructor: Terrie L. Walmsley

Office: KAP 116C

Office Hours: I am available by appointment via calendly.

Select a Date & Time - Calendly

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Course Description

The purpose of this course is to introduce students to the quantitative economic methods used to analyze trade policy issues by governments and international organizations worldwide. Several methods are discussed, although we focus on the use of a global computable general equilibrium models to undertake ex-ante analysis of trade policies and other global issues. Students will study how computable general equilibrium models have been used to examine current trade policy issues, broadening their understanding of the methods, trade theory and current trade policy issues.

The course begins with the data. Trade data and input-output tables are introduced and used to examine trade patterns and review the theory behind why countries trade. Students will learn how to use a simplified version of a global applied general equilibrium model to examine the impact of trade policies, such as the potential impact of the Trans-Pacific Partnership (TPP) and of the US raising tariffs on Chinese goods, on production, consumption, employment, wages and welfare, among other things. The course will then examine issues related to non-tariff barriers, investment, migration, new trade theories, economic growth and income inequality.

Prerequisite(s): Undergraduate level microeconomics (ECON 303) is required. Experience with excel is also very useful. The course is mathematical and relies on a good understanding of microeconomics.

Co-Requisite(s): ECON 500 Microeconomics

Course notes: Classes will take the form of lectures, discussion and hands-on lab exercises. Students are expected to attend all lectures and undertake all hands-on lab sessions. Students should bring a computer to class to access the software.

Students are expected to do set pre-class exercises available on blackboard before class. Materials include watching videos, reading newspaper articles or papers, quizzes, excel exercises and other exercises to help you prepare for in-class exercises and discussions.

Since this syllabus is prepared in advance of the semester, please note that circumstances may arise requiring some adjustment in the syllabus during the semester.

Technological Proficiency and Hardware/Software Required: Students will be required to manipulate data in excel, as well as run models using specialized economic modeling software. Students will be provided with various types of models and data via blackboard. Freely available, specialized software can be loaded onto your own computers (unfortunately no MAC compatible versions of this software are available) or accessed via the USC cloud services.

Learning Objectives and Outcomes

Throughout the course, students will be introduced to and exposed to various quantitative methods and data sources for applied trade policy analysis. By the end of the course students are expected to:

- be able to explain the various new and traditional theories of international trade;
- be able to use data to describe a country's trading relations and show how those trading relations relate to the traditional theories of trade;
- be able to compare and contrast the quantitative methods used in applied policy analysis, as well as decide and justify which applied method would be best suited to examine an issue;
- be able to apply a global computable general equilibrium model to examine the impact of a trade policy and analyze the results;
- be able to discuss the economic implications of current issues in trade policy and relate them to the theories and models learnt;
- be able to think critically about the assumptions, methods and policy recommendations of current research, in order to justify decisions or identify areas for possible improvement; and
- have practiced presenting.

Required Readings and Supplementary Materials

Links have been provided where the papers or reports are freely available and other books and journal papers can be obtained through the USC Library.

Core reading material:

Burfisher, M., 2017, Introduction to Computable General Equilibrium Models, Cambridge University Press, 2nd edition (1st edition is also adequate). Note that edition 3 is NOT recommended. This book is available from the library, although you may want to consider purchasing a copy. An e-copy is available at:

https://www.cambridge.org/us/academic/subjects/economics/econometrics-statistics-andmathematical-economics/introduction-computable-general-equilibrium-models-2ndedition?format=AR

Bacchetta, M., Beverelli, C., Cadot, O., Fugazza, M., Grether, J., Helble, M., Nicita, A., and R. Piermartini, 2012, <u>A practical guide to Trade Policy Analysis</u>, World Trade Organisation and United Nations Conference on Trade and Development Virtual Institutue. Available for download at: https://vi.unctad.org/tpa/index.html. This book includes STATA programs and data that you might find helpful.

Background reading material:

For those students who have not done an international trade course before (and even for those who have), it would be helpful to have access to an undergraduate trade theory book to provide useful background reading and intuition to the theories underlying the methods and theories being taught. Two appropriate undergraduate level books are:

Feenstra, R. C. and A. M. Taylor, <u>International Trade</u>, Worth Publishers (any edition is fine).

Krugman, P., M. Obstfeld and M. Melitz, 2015, <u>International Trade: Theory and Policy</u>, Pearson (any edition is fine).

Both these books cover similar material. I will give the (approximate) relevant chapters in both. Past students have noted a preference for Feenstra and Taylor, as my explanations are probably more similar to those provided in that book.

For those students wanting to review their math: <u>Must-have math tools for Graduate Study in Economics</u>, William Neilson, Department of Economics, University of Tennessee, Knoxville, 2009, Part 1 and 2

Students will be assessed through:

- In-Class Exercises (individual) (30 marks): A number of quizzes and other hands-on exercises will be undertaken in class using excel and the specialized software. Students are expected to participate in all pre-class and in-class exercises. You will be asked to hand some of these exercises in (in modules 3, 8 and 9). Your first task will be to sign up for a group project.
- Assignment 1: Research project topic and mapping file (group) (10 marks): students will
 be required to write up a document outlining their research question and country and
 sectoral aggregation. For the aggregation you will be required to create a mapping file.
- Assignment 2: Research project plan (group) (10 marks): students will be required to
 write up a detailed document outlining the experiments and closure they plan to use for
 their research project.
- Presentation (group) (20 marks): Students will present their group project to the class.

Research Report (group) (30 marks): students will be asked to develop and undertake a
policy experiment using a global applied general equilibrium model as part of a small
group. The group will be required to write up their findings in a report.

Assessment	% of Grade	Due Date
Task 1: Sign up for Groups (individual)	2	Sept 6
Exercises (individual)	28	Various (in class exercises/quizzes)
Assignment 1: Topic and Mapping (Group)	10	Sept 27
Assignment 2: Experiments and closure (Group)	10	Nov 2
Research Project Presentation (Group)	20	Nov 25-Dec 4
Research Project Report (Group)	30	Dec 14
TOTAL	100	

Grading Scale: Grading in this course is generally A to C minus, although students that miss classes or assessments could receive a lower grade. To receive an A, students are expected to demonstrate all of the course objectives to a high level.

Submission Policy: Assessment answers are to be submitted via Brightspace by the due date. Students will be required to submit written documents, excel files with formulas, and other program applications as instructed. The written word document should be submitted in microsoft word or pdf (no Mac documents). All answers and explanations should be provided in ONE word (or pdf) document (with tables clearly labelled and explained using headings and table notes). Excel and other supplementary files are meant to be supplementary to assist in finding calculation errors only.

Grading Timeline: Every attempt will be made to grade the assignments and provide feedback within 2 weeks of submission.

Additional Class Policies

Lectures

On-site attendance is required for completion of in-class exercises. Qwickly may be used to for recording attendance. Any student who is signed up on qwickly as attending, but is not physically present in the classroom, will be reported for academic misconduct (as will any student found assisting another student in this deception).

Additional videos, reading materials, quizzes and other activities are included on blackboard to provide background to the topic and prepare for in-class activities. It is expected that students will examine the materials for each module prior to the lectures for that module.

In-class discussions

It is worth remembering that your classmates are likely to be from many different countries and may have very different views on historical events and policy. It is expected that when discussing issues:

- You will be respectful of your classmates and their right to have an opinion.
- You will not be disruptive you will avoid interrupting your classmates to disagree, instead wait until they have finished before providing your alternate view.
- For this reason, you should be open to listening and learning from your classmates we can all learn a lot from listening to others' experiences and how they view the world.

Should I say something that you find concerning, please do let me know.

Communication

Please contact me as soon as possible with any questions or concerns during the course.

Research Projects

Every student will need to sign up for a research group in the first week of class. You will have an opportunity to select your group, however adjustments may be required to ensure groups are of similar size.

Once in a team you will work together with this team on your research projects. One of your first tasks as a team will be to decide on a topic/area of interest.

In writing the research report, students should be careful to attribute to others the data, ideas, etc. taken from them by providing detailed references and bibliography. This will help avoid any suspicion of plagiarism and make it easy for anyone reading the paper to quickly locate the reference. Data should be obtained from standard international or standard sources, including on-line and electronic sources. Every research paper should include an introduction, a brief review of the topic/literature, an explanation of the model and experiment undertaken, detailed analysis of the results, a conclusion and policy recommendations, and a bibliography. It is highly recommended that students start searching for topics early in the semester.

If at any stage, you are concerned that the distribution of work amongst group member is unfair you should speak first with your research project partners. If the problem persists, please let me know. You will be asked at the end of the project to indicate what share of the work you think you and your partner/s did.

Assessment

Please let me know ASAP if you have a letter from DSP or suspect you may have issues with any assessment piece or attendance.

Students' assignments will be penalized at the rate of 1 percent per day late, unless justified for emergency health reason. Students should notify the professor prior to the due date of any

issues or as soon as is practically possible in the case of emergencies. A doctors' certificate or other evidence is required.

Course Schedule:

Module Number	Topic	Lecture #	Date	Assessment	Core Background Reading
	Course overview	1	Tuesday, August 26, 2025		
1	Introduction	2	Thursday, August 28, 2025		
2	Utility and production	3	Tuesday, September 2, 2025		Must-have math tools for Graduate Study in Economics, Chapter 4
3	Trade Theory and Data	4	Thursday, September 4, 2025	Task 1: Sept 6	Feenstra and Taylor (2015), ch 2-4 or Krugman et al (2015), ch 3-6,
		5	Tuesday, September 9, 2025		Bacchetta et al (2012), ch 1; Armington (1969)
4	Offshoring, services and Multi- national firms	6	Thursday, September 11, 2025		Feenstra and Taylor (2015), ch 6 or Krugman et al (2015), ch 7-8; Melitz and Ottaviano (2008)
5	Applied Methods	7	Tuesday, September 16, 2025		Bacchetta et al. (2012), ch 3 and 4;
		8	Thursday, September 18, 2025		Samuelson (1954)
6	A Basic CGE Model	9	Tuesday, September 23, 2025		Bacchetta et al.
		10	Thursday, September 25, 2025	Assignment 1: Sept 27	(2012), ch 5; Burfisher (2017), ch 1-2, 4, 7
		11	Tuesday, September		

			30, 2025		
7	Trade Policy Instruments and Data	12	Thursday, October 2, 2025		
		13	Tuesday, October 7, 2025		Feenstra and Taylor (2015), ch 8 or Krugman et al
		Fall break	Thursday, October 9, 2025		(2015), ch 9; Bacchetta et al. (2012), ch 2
		14	Tuesday, October 14, 2025		
		15	Thursday, October 16, 2025		
8	The GTAP Model	16	Tuesday, October 21, 2025		Burfisher (2017), ch 1-2, 4, 7; Brockmeier (2001); Huff et al (2001)
		17	Thursday, October 23, 2025		
		18	Tuesday, October 28, 2025		Burfisher (2017) chps 2 and 6;
9	Closure	19	Thursday, October 30, 2025	Assignment 2: Nov 2	Feenstra and Taylor (2015), ch 11 or Krugman, Obstfeld and Melitz (2015), ch 10;
		20	Tuesday, November 4, 2025		
	Trade -	21	Thursday, November 6, 2025		Deardorff and Stern
10	agreements, trade wars and the WTO	23	Tuesday, November 11, 2025		(2000); UNCTAD (2015); Feenstra and Taylor (2015), ch 5, 7 or Krugman et al
		24	Thursday, November 13, 2025		(2015), ch 7-8
11	Factor mobility,	25	Tuesday, November		

	migration and Dynamics		18, 2025		
	7 ,	26	Thursday, November 20, 2025		
12	Trade, Development, climate change and disasters	27	Tuesday, November 25, 2025	Paper presentations	Krugman et al (2015), ch 11
		Thanksgiving	Thursday, November 27, 2025		
	Paper Presentations	28	Tuesday, December 2, 2025	Paper	
	29	Thursday, December 4, 2025	Presentations		
	Final research paper due		Sunday, December 14, 2025	Final research paper due	

Statement on Academic Conduct and Support Systems

Academic Integrity:

The University of Southern California is a learning community committed to developing successful scholars and researchers dedicated to the pursuit of knowledge and the dissemination of ideas. Academic misconduct, which includes any act of dishonesty in the production or submission of academic work, compromises the integrity of the person who commits the act and can impugn the perceived integrity of the entire university community. It stands in opposition to the university's mission to research, educate, and contribute productively to our community and the world.

All students are expected to submit assignments that represent their own original work, and that have been prepared specifically for the course or section for which they have been submitted. You may not submit work written by others or "recycle" work prepared for other courses without obtaining written permission from the instructor(s).

Other violations of academic integrity include, but are not limited to, cheating, plagiarism, fabrication (e.g., falsifying data), collusion, knowingly assisting others in acts of academic dishonesty, and any act that gains or is intended to gain an unfair academic advantage.

The impact of academic dishonesty is far-reaching and is considered a serious offense against the university. All incidences of academic misconduct will be reported to the Office of Academic

Integrity and could result in outcomes such as failure on the assignment, failure in the course, suspension, or even expulsion from the university.

For more information about academic integrity see <u>the student handbook</u> or the <u>Office of Academic Integrity's website</u>, and university policies on <u>Research and Scholarship Misconduct</u>.

Please ask your instructor if you are unsure what constitutes unauthorized assistance on an exam or assignment, or what information requires citation and/or attribution.

Students and Disability Accommodations:

USC welcomes students with disabilities into all of the University's educational programs. The Office of Student Accessibility Services (OSAS) is responsible for the determination of appropriate accommodations for students who encounter disability-related barriers. Once a student has completed the OSAS process (registration, initial appointment, and submitted documentation) and accommodations are determined to be reasonable and appropriate, a Letter of Accommodation (LOA) will be available to generate for each course. The LOA must be given to each course instructor by the student and followed up with a discussion. This should be done as early in the semester as possible as accommodations are not retroactive. More information can be found at osas.usc.edu. You may contact OSAS at (213) 740-0776 or via email at osasfrontdesk@usc.edu.

Support Systems:

Counseling and Mental Health - (213) 740-9355 - 24/7 on call

Free and confidential mental health treatment for students, including short-term psychotherapy, group counseling, stress fitness workshops, and crisis intervention.

988 Suicide and Crisis Lifeline - 988 for both calls and text messages – 24/7 on call

The 988 Suicide and Crisis Lifeline (formerly known as the National Suicide Prevention Lifeline) provides free and confidential emotional support to people in suicidal crisis or emotional distress 24 hours a day, 7 days a week, across the United States. The Lifeline is comprised of a national network of over 200 local crisis centers, combining custom local care and resources with national standards and best practices. The new, shorter phone number makes it easier for people to remember and access mental health crisis services (though the previous 1 (800) 2738255 number will continue to function indefinitely) and represents a continued commitment to those in crisis.

Relationship and Sexual Violence Prevention Services (RSVP) - (213) 740-9355(WELL) – 24/7 on call

Free and confidential therapy services, workshops, and training for situations related to genderand power-based harm (including sexual assault, intimate partner violence, and stalking).

Office for Equity, Equal Opportunity, and Title IX (EEO-TIX) - (213) 740-5086

Information about how to get help or help someone affected by harassment or discrimination, rights of protected classes, reporting options, and additional resources for students, faculty, staff, visitors, and applicants.

Reporting Incidents of Bias or Harassment - (213) 740-5086 or (213) 821-8298

Avenue to report incidents of bias, hate crimes, and microaggressions to the Office for Equity, Equal Opportunity, and Title for appropriate investigation, supportive measures, and response.

The Office of Student Accessibility Services (OSAS) - (213) 740-0776

OSAS ensures equal access for students with disabilities through providing academic accommodations and auxiliary aids in accordance with federal laws and university policy.

<u>USC Campus Support and Intervention</u> - (213) 740-0411

Assists students and families in resolving complex personal, financial, and academic issues adversely affecting their success as a student.

Diversity, Equity and Inclusion - (213) 740-2101

Information on events, programs and training, the Provost's Diversity and Inclusion Council, Diversity Liaisons for each academic school, chronology, participation, and various resources for students.

<u>USC Emergency</u> - UPC: (213) 740-4321, HSC: (323) 442-1000 – 24/7 on call

Emergency assistance and avenue to report a crime. Latest updates regarding safety, including ways in which instruction will be continued if an officially declared emergency makes travel to campus infeasible.

<u>USC Department of Public Safety</u> - UPC: (213) 740-6000, HSC: (323) 442-1200 – 24/7 on call Non-emergency assistance or information.

Office of the Ombuds - (213) 821-9556 (UPC) / (323-442-0382 (HSC)

A safe and confidential place to share your USC-related issues with a University Ombuds who will work with you to explore options or paths to manage your concern.

Occupational Therapy Faculty Practice - (323) 442-2850 or otfp@med.usc.edu

Confidential Lifestyle Redesign services for USC students to support health promoting habits and routines that enhance quality of life and academic performance.