

Economics 475  
D.H. Feldman, Spring 2025  
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Office: 266 Chancellors  
Hours: T, TH, 10:00 – 11:30,  
or by appointment.

## *International Trade: Theory and Policy*

Text: *International Trade: Theory and Policy*, by Krugman, P., Obstfeld, M., and Melitz, M. Twelfth Edition. Digital Rental Version at the Bookstore. *Henceforth called KOM.*

NOTE: You may also use the eleventh, or even the tenth edition. If you want a real book in your hands, you can easily get a used copy of an earlier edition off of Amazon. The pages won't line up precisely, but you should be able to figure out the concordance between editions by context. Some of you may obtain the complete hard back (which includes the macro side) called *International Economics: Theory and Policy*. That's fine too. If you acquire the MyEconLab program along with it, that will give you lots of extra practice stuff to do, but it's not at all required.

This is a class on international trade and the institutional structure of the world trade system. The ideas in this class may help you think about a few issues in contemporary domestic politics and international relations (hint: understatement alert! ☺). Over the past two centuries, economists have developed a number of important theories about what drives the gains from trade, what determines the pattern of trade between nations, and how trade affects the distribution of income within a nation. These theories are expressed in economic models that rest on a foundation of intermediate microeconomics (Econ 303). You are expected to know that background stuff. If you need a refresher, grab your old micro text and review essential things. The most vital ideas are contained in i) consumer theory, ii) production theory, and iii) market structure (perfect competition, monopoly, oligopoly, and monopolistic competition). I may review some of this material very briefly, but you are expected to understand things like why  $MRS = MRT$  means an “efficient” outcome (and to understand what efficiency really entails), or how to measure changes in consumer and producer surplus from various policy instruments.

Once we have worked through the “theory” of trade, we will examine trade policy. This is not the same thing as trade politics, though they are related. We will also model trade politics using the some of the same tools we use to examine policy. Standard economic theory will help us explore what various policy tools do, and who they affect. We will also apply optimization ideas to explore what policies are better or worse, given your goals. Much of this discussion may surprise you.

### Common Locations for Readings:

[Course Documents](#) contains most of the readings, broken down into “pdfs” or “Links.”

Under this section, you'll also find some of the lecture material and useful research links.

[Policy Memo Information](#) contains readings that are related to writing your policy memo. You will also find some class readings in here because, well, they're policy stuff. ☺

This section of Bb is not yet fully populated. I will be adding material to it over the course of the semester.

[Video Links](#) is a repository of videos I have prepared.

Some of these are Panopto videos, and others are in other formats. I will cover some, but not necessarily all of this material in class. Some of it is there to help you understand the derivation of particular curves or relationships that we go over in class. The video is there as a 24/7 resource.

## **EVALUATION:**

**Exams:** You will have two exams during the term and a shorter “quiz” as a final exam. Each exam is worth 30% of the grade. The first exam follows the Specific Factors model. This exam is a gentle introduction to my tests because it uses a limited set of models and tools. The second exam occurs after the section on Returns to Scale and Global Integration. You will see these exams listed on the syllabus. The final “quiz” is half the length of the midterms, and it will be weighted toward the final section of the class on the Tools of Commercial Policy. This final “quiz” is worth 15% of your grade. As a nod to improvement, if you do better on the final than on one of your two other exams, I will reweight the final at 20% and downweight the offending exam to 25%.

**Homework:** Note that there are **two kinds of homework**. Sprinkled throughout you will see reference to “**problem sets**.” These are non-graded. The problem sets are posted already, along with an answer key. Ignore these “voluntary” problems at your peril. They are actually harder than the material on the exams, but they will help you think about what makes the models work. I will take some class time to work through some of this material. I may also put you in teams to, ah, help me during class as we collectively think about what makes some of the problems tick.

The second kind of homework is graded, sort of. We will have four graded homeworks that I will make “live” on a particular day. You will then have a day to turn the problem in on Bb or at our next class meeting in hard copy (my strong preference). You can work together with classmates if you wish. Just turn the document in with all of the team’s names attached. These assignments will be graded on the ✓+, ✓, ✓- scale. The problems will be reasonably close to the types of problems you could see on an exam. Together, your performance on these problems is worth 3% of your grade. Not much, but together with attendance/participation it can affect borderline grades.

**Some Friendly Advice:** You should sort into study groups to work on the non-graded problem sets. Those could be the same groups who work together on the “homework,” or who just like to study together! Limit the number of people in your group to a maximum of four to ensure that shirking is reduced to a bare minimum. One person doth not a study group make. And five is “right out.”<sup>1</sup> Use the study groups for more than just the problem sets! Meet several times per week to discuss the course and to argue about facts, theory, and policy. Make sure you work on problem sets continuously instead of trying to cram them into your head just before the exams. If you wish,

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<sup>1</sup> Monty Python and the Holy Grail (1975). Holy Hand Grenade Speech, ... oh, just look it up.

I can help you set up a place on the Blackboard site so that you can communicate within your group about problem sets, or about anything class related. I encourage people to post questions about the material to open class forums, and I will reward people who volunteer time to help unconfuse the bewildered. This is another way to earn class participation kudos.

**Participation:** Speaking of attendance/participation... I will keep tabs on who is there and active, and who is not. It's not a big issue. Only 4%. Together with the homeworks, however, it can affect people whose performance is close to the margin of, say, B+ and A-.

**Policy Memo:** Lastly, you will *write* and *present* one short "paper" in the class. I will put you together in groups of three or four for this assignment. In the real world, policy recommendations are often hashed out by groups of people who bash at each other's ideas until some consensus is reached. The policy memo must be less than 700 words (roughly two pages of text). I will post more information about this topic on Blackboard. You will start thinking about this as we work through the tools of policy, and the class presentations will take place during the final week of the course. Each group should plan one office hours session with me to go over your ideas. This assignment will be worth 18%. I fully expect people to do well on this one. That's the theory!

## **Various Policies and other sorts of information ...**

### **Policy on ChatGPT or other AI:**

This is relevant especially for the policy brief -- All work submitted in this course must be your own and must be cited appropriately. If you incorporate AI-generated content or ideas in assignments or in the policy memo, you must indicate your use of such tools by providing a full log of prompts, outputs, and revisions.

### **From the Student Accessibilities Service Office:**

"William & Mary accommodates students with disabilities in accordance with federal laws and university policy. Any student who feels s/he may need an accommodation based on the impact of a learning, psychiatric, physical, or chronic health diagnosis should contact Student Accessibility Services staff at 757-221-2509 or at [sas@wm.edu](mailto:sas@wm.edu) to determine if accommodations are warranted and to obtain an official letter of accommodation. For more information, please see [www.wm.edu/sas](http://www.wm.edu/sas) "

### **From the Dean of Students and the Honor Council:**

"The College of William & Mary has had an honor code since at least 1779. Academic integrity is at the heart of the College, and we all are responsible for upholding the ideals of honor and integrity. The student-led honor system is responsible for resolving any suspected violations of the Honor Code, and I will report all suspected instances of academic dishonesty to the honor system. The Student Handbook ([www.wm.edu/studenthandbook](http://www.wm.edu/studenthandbook)) includes your responsibilities as a student and the full Code. Your full participation and observance of the Honor Code is expected. To read the Honor Code, see [www.wm.edu/honor](http://www.wm.edu/honor)"

### **From Sharon Zuber of the Writing Center:**

The Writing Resources Center, located on the first floor of Swem Library, is a free service provided to W&M students. Trained consultants offer individual assistance with writing, presentation, and other communication assignments across disciplines and at any stage, from generating ideas to polishing a final product. To make an appointment, visit the WRC webpage [www.wm.edu/wrc](http://www.wm.edu/wrc). Questions? Contact Sharon Zuber at [slzube@wm.edu](mailto:slzube@wm.edu) or Lori Jacobson at [ljacobson@wm.edu](mailto:ljacobson@wm.edu).

## **Course Outline**

Prequel: I want you to think about learning in a digital environment, and to understand the strengths and weaknesses of digital content. That's the purpose of Sue Dynarski's little article. I also want you to look at the institutional structure of the World Trade Organization from the WTO's own perspective. This will give you some background on the architecture of the world trading system that is unraveling.

**Reading:** Dynarski, Susan. For Better Learning in College Lectures. [pdfs](#).  
The WTO in Brief (all four sections). [Links](#).

## **Section I: Introduction to World Trade**

- Basic patterns of world trade
- The Gravity Model
- The WTO and the institutional structure of world trade.

**Reading:** KOM, chapters 1-2.  
Are You Open: an interactive map from the St. Louis Fed. [Links](#).  
Op-ed by Krugman (Brexit meets Gravity). [Op-Ed Documents](#).

I will briefly walk through the introductory material in chapters 1-2. I have also put up some op-eds. These are examples of "persuasive writing."

*An Extension: Trade, the environment, and social collapse.*

**Reading:** Diamond, Jared, *Paradises Lost*, *Discover Magazine*, November 1997. [On Blackboard in External Links](#).

## **Section II: Trade Theory in Competitive Markets**

### **Ricardian Model**

- Comparative Advantage vs. Absolute Advantage
- The gains from trade
- The Terms of Trade
- Some common myths

- traded and non-traded goods
- An infinite-goods version of the Ricardian Model

**Videos:** Basic Ricardian Comparative Advantage  
 Drawing the Relative Supply Curve  
 Why Small Countries Gain More from Trade

**Reading:** KOM, chapter 3.

Krugman, P., "What do Undergrads Need to Know About Trade," *American Economic Review*, 83 (May 1993), 23-27. [PDF file](#)

Feldman, D. "Ricardian Model with N Goods." [Under Lecture Notes](#).

### Problem Set: 1

*An Extension: Why are price levels lower in developing countries? or, a dollar sure is worth more in Delhi than in Duluth.*

Reference: The Penn World Table. [On Blackboard in External Links](#).

Specific Factors – alternative explanations of comparative advantage

- The Concept of "Specific Factors"
- An Immobile Factors model
- Why trade does not benefit everyone
- The specific factors model and the origins of interest group theory

**Videos:** Immobile Factors Model  
 Specific Factors – Demand for Labor

**Reading:** KOM, chapter 4

Further Reading:

Autor, Dorn, and Hanson (2016). The China Shock: Learning from Labor Market Adjustment to Large Changes in Trade. <https://www.ddorn.net/papers/Autor-Dorn-Hanson-ChinaShock.pdf>

Gary C. Hubauer and Zhiyao Lu, "The Payoff to America from Globalization: A Fresh Look with a Focus on Workers, Peterson Institute for International Economics, Policy Brief 17-16, May 2017. *Zhiyao (Lucy) Lu sat in this class not too many years ago.*

### Problem Set: 2

**First Exam (very tentative date: Wednesday, February 14<sup>th</sup>)**

The Heckscher-Ohlin Model (the neoclassical model of trade)

- Relative factor abundance and the pattern of trade: The Heckscher-Ohlin theorem.
- Convergence: The Factor Price Equilization theorem.
- Winners and losers: The Stolper-Samuelson theorem.
- Changes in factor endowments: The Rybczynski theorem (pronounced Rib-Chin-Ski ... ☺).
- The geometry of the Standard Trade Model and the Efficiency Properties of Free Trade

**Reading:** KOM, chapters 5-6.

**Videos:** Heckscher-Ohlin Model Assumptions  
Factor Abundance and Factor Intensity  
Heckscher-Ohlin Theorem  
Standard Trade Model

**Problem Set: 3.**

*An Extension: Economic Sanctions*

**Reading:** Davis, Lance, and Engerman, Stanley, “Sanctions: Neither War Nor Peace,” *Journal of Economic Perspectives*, 17 (Spring 2003), 187-97. [On Blackboard in Course Documents \(PDF file\).](#)

## **Section III: Returns to Scale and Global Economic Integration.**

### External Economies of scale and the pattern of trade

- The geographic location of industries.
- Historically determined trade patterns and the role of accident.
- International trade, and interregional trade.
- The logic of sudden change

**Videos:** Scale Economies – The Big Picture  
External Scale Economies

**Reading:** KOM, chapter 7.

### Internal Scale Economies and Firms in the Global Economy

- Monopolistic Competition in Differentiated Products
- Intra-industry versus inter-industry trade and the distribution of income
- Heterogeneous firms: the Melitz Model.
- Trade and Productivity, the role of exports.
- Dumping

**Reading:** KOM, chapter 8, up to 196, plus appendix (p. 214).  
Feldman, D., “The Monopolistic Competition Model.” [Under Course Documents: Lecture Notes. This is all of the algebra, paired with the geometry.](#)

**Videos:** Building the Monopolistic Competition Model  
Exporting Firms in the Melitz Model

**Problem Set: 4**

### International Migration

- The Benefits and Consequences of Immigration

- The other side of the looking glass – emigration, the gains from leaving.

**Reading:** KOM: Reread chapter 4, pp. 72-78. This is where labor mobility first appears in KOM.  
 Borjas, George J., "The Economic Benefits of Immigration," *Journal of Economic Perspectives*, 9 (Spring 1995), 3-22. [On Blackboard in Course Documents \(PDF file\)](#).

Clemens, Michael, "Economics and Emigration: Trillion Dollar Bills on the Sidewalk?"  
*Journal of Economic Perspectives*, 25 (Summer 2011), 83-106. [On Blackboard in Course Documents \(PDF file\)](#).

**Videos:** Borjas—Simple Model

**Second Exam (Very tentative date: Friday, March 21<sup>st</sup>)**

## Commercial Policy and the Politics of Trade Policy

### Economic Effects of Tariffs and Quotas (small country case)

- How do Tariffs and Quotas Work?
- The welfare effects of commercial policies
- non-economic objectives (like “reducing dependence” or “national security”)
- tariff equivalence propositions (when is a tariff the same as a quota?)
- the Effective Rate of Protection
- How do trade policies affect price uncertainty, and how does this affect the policies we get?

**Videos:** Tariff in a Small Open Economy

Export Tax in a Small Open Economy

Import Demand Curve

The Mechanics of a Quota

Tariffs vs. Quotas: Uncertainty

Uncertainty vs. Artificial Stability: Effects on Consumer and Producer Surplus

Effective Rate of Protection

**Reading:** KOM, chapter 9, with appendix.

Amiti, M., Redding, S., and Weinstein, D., “The Impact of the 2018 Tariffs on Prices and Welfare,” *Journal of Economic Perspectives* 33:4 (Fall 2019), 187-210.

### **Problem Set: 5**

### Principles of “Optimal” policy

- externalities and the hierarchy of policies (what is a by-product distortion)
- tariffs to generate government revenue: The Maximum Revenue Tariff
- Infant industry protection (dynamic returns)
- the "optimal" tariff for a large country, i.e. market power in trade.

**Videos:** Maximum Revenue Tariff

Marginal Welfare Cost of Revenue Collection

**Reading:** KOM, chapter 10 from 246-254, and appendix.

## Problem Set: 6

### Further Reading:

Corden, W.M., *Trade Policy and Economic Welfare*, Oxford: Clarendon Press, 1974.  
Chapters 2-4. [Many lectures are drawn from this material] [On Blackboard in Course Documents \(PDF file\)](#).

### If We Have Some Time:

#### A. The Political Economy of Trade Policy

##### 1. Income Distribution and Trade Policy

- Rent-Seeking
- Self-interest and the role of interest groups
- Endogenous Policy Theory
- The China Shock

**Reading:** KOM, chapter 10, pp. 255 – 259.

Look at Autor, Dorn, and Hanson's website: <http://chinashock.info>

##### 2. Administered Protection and Declining Industries

- The International Trade Commission
- Anti-Dumping, Safeguard, and Countervailing Duty processes.
- Trade Adjustment Assistance

Hufbauer, Gary C., and Goodrich, Ben, "Steel Policy, the Good, the Bad, and the Ugly," Institute for International Economics, Policy Brief PB03-1, January 2003.  
[On Blackboard in Course Documents \(PDF file\)](#).

Kletzer Lori G., and Litan, Robert, "A Prescription to Relieve Worker Anxiety, Institute for International Economics, Policy Brief PB01-02, January 2001.  
[On Blackboard in External Links](#)

##### 3. International Negotiation and the World Trade Organization

- From the GATT to the WTO
- Rationales for multilateral negotiation: the case for MFN
- Rules and dispute mechanisms
- Preferential Trade Areas and Agreements (like the EEC, NAFTA, MERCOSUR).

**Reading:** KOM, chapter 10, pp. 260 – end.

***Policy Brief: Presentations and discussion: April 30<sup>th</sup> and May 2<sup>nd</sup>***

Some additional material we MAY be able to cover if time permits ...



# The Global System: Current Controversies

## A. The "New International Economics" and Activist Trade Policy

- Scale economies and "strategic" sectors.
- Duopoly and other game theoretic approaches.
- Problems with strategic trade policy

Videos: Duopoly Model: Strategic Trade Policy

Reading: KOM, chapter 12, pp. 298 – 306.

BBC video: [Why the Airbus 380 Never Really Took Off](#). Also on BB under Readings Available as Links.

“The Airbus Showdown,” by Robert Samuelson. *Washington Post*, December 8, 2004. [On Blackboard in Course Documents](#).

Further Reading:

Irwin, D, and N. Pavcnik (2004). “[Airbus versus Boeing revisited: International Competition in the Aircraft Market](#)”. *Journal of International Economics*; V.64-#2, pp. 223-245.

Problem Set: 7 (maybe, but probably not)

## B. Trade, the Environment, and Standards

- Competition for industries: A race to the bottom?
- Cross-border externalities and the global commons
- process vs. product
- the role of the WTO

Videos: Trade and Pollution

Reading: KOM: Chapter 12, pp. 307 – end.

The Environment -- A New High Profile. [On Blackboard in External Links](#).

Bagwell, K, and Staiger, R., “The WTO as a Mechanism for Securing Market Access Property Rights, Implications for Global Labor and Environmental Issues,” *The Journal of Economic Perspectives*, 15 (Summer, 2001), 69-88. [On Blackboard in Course Documents \(PDF file\)](#).

Brown, D., “Labor Standards: Where do they Belong on the International Trade Agenda?” *The Journal of Economic Perspectives*, 15 (Summer, 2001), 89-112. [On Blackboard in Course Documents \(PDF file\)](#).

Further Reading:

Bhagwati, J., and Srinivasan, T.N., "Trade and the Environment: Does Environmental Diversity Detract from the Case for Free Trade," *Fair Trade and Harmonization: Prerequisites for Free Trade?*, Cambridge: MIT Press, 1996) [\[More Technical, and quite provocative. From the book Krugman reviews\]](#)  
Corden, W. Max, *Trade Policy and Economic Welfare*, ch. 13 “Trade Policy and the Environment,” 2<sup>nd</sup> edition, Oxford: Oxford University Press, 1997.

***Final Exam: Tuesday, May 9<sup>th</sup> from 2:00 – 5:00 P.M. in class***