Economics 475 D.H. Feldman, Spring 2020 email: dhfeld@wm.edu

appointment.

Office: 266 Tyler Hours: M, W, 3:30 – 4:30, and F, 1:00 – 2:00 or by

# International Trade: Theory and Policy

Text: *International Trade: Theory and Policy*, by Krugman, P., Obstfeld, M., and Melitz, M. (Pearson, 2018). Eleventh Edition. At Bookstore. *Henceforth called KOM*.

NOTE: You may also use the tenth, or even the ninth edition. They will be cheaper. The book we're using is the "split" version that only covers the trade material. 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.

Some Helpful but Optional Background Reading About The Global System:

Drezner, D., The Irony of Global Economic Governance: The System Worked, IIGG Working Paper, October 2012. On Blackboard under Course Documents.

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). You will be expected to understand things like why MRS = MRT means an "efficient" outcome, 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, and we can model the politics using the same tools we use to examine policy. We will use standard economic theory to 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.

Op-Ed Information also contains some readings, listed in the folder Op-Ed Documents.

This folder also contains essential information for writing your op-ed. More on that at the end of the syllabus.

### **Course Outline**

#### 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.

The WTO in Brief (all four sections). Links.

Dynarski, Susan. For Better Learning in College Lectures. pdfs.

Worthen, M., Lecture Me – Really! Links.

Op-eds by Krugman (Brexit meets Gravity), and Rodrik. Op-Ed Documents.

Dynarski and Worthen address best practices in learning. They are not writing about international trade. Read what they have to say. Their arguments and evidence reflect my thinking as well. Worthen's op-ed also introduces you to the op-ed as a form of writing. You will write one in this class. The pieces by Krugman and Rodrik are examples of reasonably current trade-related op-eds.

# II. Trade Theory in Competitive Markets

#### A. Comparative Advantage in the Ricardian Model

- The gains from trade
- The Terms of Trade
- Some common myths
- traded and non-traded goods
- An infinite-goods version of the Ricardian Model

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.

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

Reading: Diamond, Jared, *Paradises Lost*, *Discover Magazine*, November 1997. On Blackboard in External Links.

# First Quiz: Friday, February 14th

#### B. Specific Factors, Trade, and the distribution of income

- Factor mobility and the gains from trade (an immobile factors model)
- Winners and losers: why free trade does trade **NOT** benefit everyone?

Reading: KOM, chapter 4

Further Reading:

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

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** 

#### C. Resources: the Heckscher-Ohlin model and the Standard Trade Model

- Relative factor abundance and the pattern of trade
- Winners and losers again: Factor Price Equalization and the Stolper-Samuelson theorem
- Changes in factor endowments: The Rybczynski theorem.
- The Standard Trade Model: growth and the terms of trade.

Reading: KOM, chapters 5-6.

**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).

FIRST EXAM: Friday, March 6th (this is the day before spring break)

SPRING BREAK

# III. Returns to Scale and Global Economic Integration.

#### A. 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.

Reading: KOM, chapter 7.

#### B. 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.

**Problem Set: 4** 

#### C. Outsourcing and Multinationals

Reading: KOM, chapter 8, pp 197 – end of chapter.

Bhagwati, J., Panagariya, A., and Srinivasan, T.N., "The Muddles over Outsourcing," *Journal of Economic Perspectives* 18 (Fall 2004), 93-114. On Blackboard in Course Documents (PDF file).

Further Reading:

Irwin, Douglas: "Outsourcing is Good for America," AEI, February 2004.

Mann, Catherine: "Globalization of IT Services and White Collar Jobs: The Next
Wave of Productivity Growth," IIE Policy Briefs, PB03-11, December 2003.

Bureau of Labor Statistics, Occupational Employment Statistics. The raw data on
employment by occupation is here: <a href="http://www.bls.gov/oes/home.htm">http://www.bls.gov/oes/home.htm</a>

#### **D.** International Migration

- The Benefits and Consequences of Immigration
- The other side of the looking glass: emigration

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).

Further Reading:

Freeman, Richard B., "People Flows in Globalization," *Journal of Economic Perspectives*, 20 (Spring 2006), 145-170. On Blackboard in Course Documents (PDF file).

### Op-Ed Due: Sunday, April 28th at 5:00 P.M. (turn in online)

### IV. Commercial Policy and the Politics of Trade Policy

#### A. Economic implications of tariffs and quotas

- 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?)
- measurement of costs
- the Effective Rate of Protection
- How do trade policies affect price uncertainty, and how does uncertainty affect the trade policies we get?

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**

#### B. 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.

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).

#### C. 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: <a href="http://chinashock.info">http://chinashock.info</a>

#### 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 Economes, 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.

**Problem Set: 7 (maybe)** 

Second Exam: Friday, April 24th.

### V. 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

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). "<u>Airbus versus Boeing revisited: International Competition in the Aircraft Market</u>". *Journal of International Economics*; V.64-#2, pp. 223-245.

#### 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

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 Propery 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 (Quiz): December 16th at 9:00 A. M.

#### **EVALUATION:**

You will have five significant graded assignments this semester. The first is a quiz that follows the Ricardian model. This quiz is a gentle introduction to my tests, and it helps you to prepare for the first exam that follows section II. The quiz is worth 12% of your grade. We will have two midterm exams. Each is worth 33% of your grade. You will see these listed on the syllabus after sections II and IV of the course. The second midterm will take place on the last day I'm allowed to give an exam (Friday, November 29<sup>th</sup>). The "final examination" is optional, hence the quotes. It will be structured like the first quiz and is designed to be doable in 30 minutes. It will be comprehensive, i.e. drawn from models throughout the class. If you do better on this "final" than on the first quiz, I will replace the lower mark with the higher mark. If your worst mark is on one of the exams instead of the first quiz, I will replace a portion of the value of the offending exam with the points from the final quiz. This is a small bonus for improvement or a small reward for the extra work done to repair the damage from a less than stellar day. Do not count on the final quiz to radically alter your course grade. That is statistically very unlikely. In fact, if you are not

near a grade borderline, your best choice may be to skip my final "quiz" and reallocate your time toward another class's exam or final paper where the marginal gain to you from your efforts may be substantially higher.

Lastly, you will write one short "paper" in the class. Given the contemporary populist buzz about most things global/international, I'm asking you to write an op-ed on some contemporary issue in trade or trade policy. This is an interesting assignment, and I contend that mastering the op-ed format is a real job skill. For many students it's quite a challenge. The op-ed is strictly limited to 750 words, and yet you are expected to make a compelling *persuasive* case for some position or idea. Many of you have not tried your hand at persuasive writing in such a space-constrained environment. In a 750 word essay there is no room for polemical ranting or other forms of bullshit. A 750 word essay is far more difficult to build than a 5-10 page paper. An op-ed with fluff is an op-ed that says very little. You can't hide a weakly written argument in that short a space. Every word counts. This is a paper that should be drafted early in the course and then carefully redrafted several times as you learn more about the issues and as you rethink your argument or your sentence structure. Like the first quiz, the op-ed will be worth 12% of your grade. It is due by 5:00 P.M. on Friday, November 19<sup>th</sup> at the latest. You can turn it in much earlier if you want to get it out of the way!

You will find a lot of information on how to write an op-ed under Op-Ed Information in the Op-Ed Documents folder. The first four items taken together form a "how to" manual for aspiring writers. Bret Stephens goes through the dos and don'ts of op-ed writing in an op-ed format! I give my own writing tips next. The third document is a link to an essay on how to avoid passive voice. I detest overuse of passive voice, and if you want to become a good writer you will learn how to detect its evil presence and to minimize it. Passive voice wastes space almost by definition. Oversuse it and you WILL see my red pen flashing!! This warning is for your benefit. The last of the four is a long paper by a guy at Duke (Dudenhefer) written for Duke economics students. For our purposes, his "six principles" are the most important takeaway, though if you are writing a research paper for another class you may want to explore the rest of the document.

The remaining 10% of your grade is based on a number of other things. The first is attendance and participation. If you are not in class you are much less likely to master the complex models we build to explain global trade. Attendance is objective, and participation is subjective. I'm the judge of the latter. The attendance/participation is 5%. That may not seem like a large amount, but it could mean the difference between a C+ and a B-. The remaining 5% comes from a set of short problems that you will solve and turn in. These can be turned in individually, or collectively from your study group. More on study groups in the next paragraph. When I post the questions, you will have a short amount of time (a few days) to complete the question or questions, and submit them in class. These problems will be good practice for the quizzes and exams, though you will not be under the same sort of time pressure that you will face on quizzes and tests.

I have also prepared a series of larger problem sets as non-graded homework assignments. The ones from last semester are in place, and I will update them and change them as we go along. Since they are non-graded, the answers are already there too. That does not mean the problem sets are unimportant. Oh no. You will have difficulty succeeding on the graded homework questions, the quizzes, and the exams, if you don't spend quality time working on these extended homework assignments. They are a crucial part of mastering the models that we use to explain global trade, national trade policy, and the institutional structure of trade.

Some Friendly Advice: You should sort into study groups to work on these problem sets. 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." 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, 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 un-confuse the bewildered. This is another way to earn class participation kudos.

We have a TA for the class. Her name is Sheng Long. She has taken this class with me so she understands the material and the structure of the class. Sheng will hold open hours once or twice per week. Once per week at the beginning, and twice per week before a test. Please keep her very busy. Do not wait to utilize her help until the week before a test or quiz. Whenever you have questions from class notes, the text, or from problem sets, talk to her or to me in a timely fashion. Come as a group as well. That way everyone in the group will benefit from every other group member's questions.

Additional Information: I will post Sheng's TA sessions as soon as they are formalized. I will give you the room once that has been determined.

#### 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 to determine if accommodations are warranted and to obtain an official letter of accommodation. For more information, please see 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) 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"

#### 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,

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

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 <a href="https://www.wm.edu/wrc">www.wm.edu/wrc</a>.

The WRC opens for the Spring semester on Monday, January 29th.

Questions? Contact Sharon Zuber at <a href="mailto:slzube@wm.edu">slzube@wm.edu</a> or Lori Jacobson@wm.edu.