

**University of Waterloo**  
**Department of Economics**  
**ECON 436/673**  
**Topics in International Trade**  
**Winter 2018**  
**MW 1:00pm-2:20pm HH 259**

**Instructor and T.A. Information**

Instructor: Horatiu RUS  
Office: HH 203  
Office Phone: #38338  
Office Hours: Fridays 1-2pm  
Email: hrus@uwaterloo.ca  
Twitter: @horatiurus

**Course Description**

This graduate/advanced undergraduate course discusses selected international trade theories and some empirical topics representative of recent research. After establishing a common grounding in the method of the dual general equilibrium approach to classical trade theory, the course moves to discuss recent influential theoretical and empirical contributions to the field. Theory, extensions, applications and empirical tests of models such as: increasing returns to scale and imperfect competition, heterogeneous agents, trade policy instruments, gravity models, political economy, offshoring, distributional effects and trade and environment will be covered. The topics are covered using a combination of graphical, mathematical and empirical economics treatments.

**Required Text**

- There is no required textbook for the course.

. However, several useful sources are listed below as *recommended* and will be placed ON RESERVE in UW Library - Porter:

1. Feenstra, Robert and Alan Taylor (2008-2016), International Trade, any edition, Pearson/Addison-Wesley.

and

Feenstra, Robert (2004), Advanced International Trade: Theory and Evidence, Princeton University Press. Also available *online* via the UW Library.

2. Dixit, Avinash K. Norman, Victor (1980), Theory of international trade : a dual, general equilibrium approach, Cambridge University Press.

3. Elhanan Helpman, Understanding Global Trade, Harvard University Press (2011).

(an entirely non-technical yet rigorous discussion of the evolution of economic thinking about international trade)

4. Helpman, Elhanan and Paul Krugman (1987), Market structure and foreign trade: increasing returns, imperfect competition, and the international economy, MIT Press.
5. Paul Krugman and Maurice Obstfeld (2008-2016), International Economics: Theory and Policy, any edition, Pearson/Addison-Wesley.
6. James Markusen, Melvin, Kaempfer and Maskus, International Trade: Theory and Evidence  
download at: <http://spot.colorado.edu/~markusen/textbook.html>.

## Course Requirements and Assessment

For Econ 436

Assessment	Date of Evaluation (if known)	Weighting
Problem set 1	tba	10%
Problem set 2	tba	10%
Midterm Exam	<i>February 26 - tentative</i>	30%
Class Participation	<i>na</i>	10%
Final Exam	Scheduled by Registrar's Office	40%
<b>Total</b>		<b>100%</b>

For Econ 673

Assessment	Date of Evaluation (if known)	Weighting
Problem set 1	tba	10%
Problem set 2	tba	10%
Midterm Exam	<i>February 26 - tentative</i>	25%
Class Participation	<i>na</i>	10%
Short presentation	tba	15%
Final Exam or Research Project Proposal	Scheduled by Registrar's Office or tba	30%
<b>Total</b>		<b>100%</b>

Important Notes on assignments and exams:

1. The problem sets include several questions based on the material discussed in the lectures or readings. These problem sets are meant to deepen your understanding of the issues and can be explored in small teams. You can work in groups of 2 or 3, but must submit individually drafted versions of the assignment.
2. Exams cover all lecture material, indicated textbook chapters and problems and additional reading.

3. There are no make-up tests. If you miss a midterm exam and present appropriate documentation, the weight will be shifted to the final.
4. The final research project proposal has to be approved in advance by the instructor, if this option is chosen by the graduate student.

### Course Outline

Students are required to read the textbook chapters and additional readings for every section. Please note that this list is tentative. Updates are probable, depending on class background and interests, and will be announced in class and posted on UW-Learn.

Week	Date	Topic	Readings Due
1	tba	International Trade: Stylized facts. The Gains from Trade	Helpman and Krugman, 1985, pp. 28-29 + TBA
2	tba	Introduction to the dual approach to International Trade. A Simple Exchange Model. The transfer problem	Dixit and Norman - chapters 1-3 Woodland - chapter 2 Feenstra, 2003, pp. 179-188. Yano, Makoto, 1983. "Welfare Aspects of the Transfer Problem," Journal of International Economics, Elsevier, vol. 15(3-4), pages 277-289, November. + TBA
3	tba	International Trade Driven By Technology Differences: the Ricardian Model	Dornbusch, Rudiger, Stanley Fischer, and Paul A. Samuelson. "Comparative Advantage, Trade, and Payments in a Ricardian Model with a Continuum of Goods." American Economic Review 67 (1977): 823-839 Deardorff, Alan V. "The General Validity of the Law of Comparative Advantage." Journal of Political Economy, no. 5 (1980): 941-957.  Arnaud Costinot, 2009. "An Elementary Theory of Comparative Advantage," Econometrica, Econometric Society, vol. 77(4), pages 1165-1192, 07.  Bernhofen, Daniel, and John Brown. "A Direct Test of the Theory of Comparative Advantage: The Case of Japan." Journal of Political Economy 112, no. 4 (2004): 48-67.  Bernhofen, Daniel M., and John C. Brown. 2005. "An Empirical Assessment of the Comparative Advantage Gains from Trade: Evidence from Japan." American Economic Review, 95(1): 208-225.  Dave Donaldson, Arnaud Costinot and Ivana

Week	Date	Topic	Readings Due
			<p>Komunjer. "What Goods Do Countries Trade? A Quantitative Exploration of Ricardo's Ideas" Review of Economic Studies, 79(2): 581-608, 2012.</p> <p>Arnaud Costinot and Dave Donaldson. "Ricardo's Theory of Comparative Advantage: Old Idea, New Evidence", AER Papers and Proceedings 2012, 102(3): 453-458. + TBA</p>
4	tba	The Specific Factors Model	<p>Krugman \&amp; Obstfeld chapter 3 (ninth or older than seventh versions only) or Feenstra \&amp; Taylor chapter 3 or (more advanced) Markusen et al. chapter 9</p> <p>Helpman: chapter 3 + TBA</p>
5	tba	International Trade Driven by Factor Endowments: the Heckscher-Ohlin-Samuelson Model	<p>Helpman: chapter 2</p> <p>Dixit and Norman (1980) chapters 4 and 5.</p> <p>Feenstra (2003) chapters 1, 2, and 3.</p> <p>Helpman and Krugman (1985) chapter 1.</p> <p>Deardorff on Lerner Diagrams (<a href="http://www-personal.umich.edu/~alandear/writings/Lerner.pdf">http://www-personal.umich.edu/~alandear/writings/Lerner.pdf</a>)</p> <p>Jones, Ronald W. "The Structure of Simple General Equilibrium Models." Journal of Political Economy 73 (1965):557-572.</p> <p>Donald R. Davis and David E. Weinstein, 2001. "An Account of Global Factor Trade," American Economic Review, American Economic Association, vol. 91(5), p. 1423-1453.</p> <p>Williamson and O'Rourke "The Heckscher-Ohlin Model Between 1400 and 2000: When It Explained Factor Price Convergence, When It Did Not, and Why," NBER Working Papers 7411. + TBA</p>
6	tba	Extensions and Empirical Tests of the H.O. Model	<p>Donald R. Davis and David E. Weinstein, 2001. "An Account of Global Factor Trade," American Economic Review, American Economic Association, vol. 91(5), pages 1423-1453, December.</p>

Week	Date	Topic	Readings Due
			<p>Daniel Treßer: "International Factor Price Differences: Leontief Was Right!", Journal of Political Economy, University of Chicago Press, vol. 101(6), pages 961-87, December 1993.</p> <p>Trefler, Daniel, 1995. "The Case of the Missing Trade and Other Mysteries," American Economic Review, American Economic Association, vol. 85(5), pages 1029-46, December.</p> <p>Harrigan, James. "Technology, Factor Supplies, and International Specialization: Estimating the Neoclassical Model." American Economic Review 87, no. 4 (1997): 475-94. + TBA</p>
7	tba	Increasing Returns. Imperfect Competition and International Trade	<p>Feenstra, ch. 5</p> <p>Helpman ch. 4</p> <p>Helpman and Krugman ch. 3, 7, 11</p> <p>Ethier, "Decreasing Costs in International Trade and Frank Graham's Argument for Protection", Econometrica (1982).</p> <p>Paul Krugman, "Increasing Returns, Monopolistic Competition and International Trade", Journal of International Economics (1979).</p> <p>Brander, James A., 1981. "Intra-industry trade in identical commodities," Journal of International Economics, Elsevier, vol. 11(1), pages 1-14, February.</p> <p>Antweiler, Werner, and Daniel Trefler. 2002. "Increasing Returns and All That: A View from Trade ." American Economic Review, 92(1): 93-119.</p> <p>Paul Krugman's Nobel Prize Lecture (video) + TBA</p>
8	tba	Trade Policy Instruments	<p>Feenstra ch 7,8</p> <p>Brander, J. A. and B. Spencer, Tariffs and the Extraction of Foreign Monopoly Rents under Potential Entry, Ó CJE (1981).</p>

Week	Date	Topic	Readings Due
			<p>Trefler, Daniel. "The Long and Short of the Canada-U.S. Free Trade Agreement." <i>American Economic Review</i> 94, no. 4 (2004): 870-95.</p> <p>Broda, Christian, Nuno Limao, and David E. Weinstein. 2008. "Optimal Tariffs and Market Power: The Evidence." <i>American Economic Review</i>, 98(5): 2032-65.</p> <p>+ TBA</p>
9	tba	Firms in International Trade. Gravity models	<p>Marc J. Melitz. "The Impact of Trade on Intra-Industry Reallocations and Aggregate Industry Productivity" <i>Econometrica</i>, Vol. 71, No. 6 (Nov., 2003), pp. 1695-1725.</p> <p>Chaney, Thomas. 2008. "Distorted Gravity: The Intensive and Extensive Margins of International Trade." <i>American Economic Review</i>, 98(4): 1707-21.</p> <p>Melitz, Marc J., and Daniel Trefler. 2012. "Gains from Trade When Firms Matter." <i>Journal of Economic Perspectives</i>, 26(2): 91-118.</p> <p>Bernard, Andrew B. and J. Bradford Jensen. 2004. <i>Why Some Firms Export.</i> <i>Review of Economics and Statistics</i>.</p> <p>Bernard, Andrew, Stephen Redding, and Peter Schott. "Comparative Advantage and Heterogeneous Firms." <i>Review of Economic Studies</i> 74, no. 1 (2007): 31-66.</p> <p>Arkolakis, Costas, Arnaud Costinot, and Andrés Rodríguez-Clare. 2012. "New Trade Models, Same Old Gains?" <i>American Economic Review</i>, 102(1): 94-130.</p> <p>Anderson, James E., and Eric van Wincoop. "Trade Costs." <i>Journal of Economic Literature</i> 42, no. 3 (2004): 691-751.</p> <p>Stephen J. Redding, 2011. "Theories of Heterogeneous Firms and Trade," <i>Annual Review of Economics</i>, Annual Reviews, vol. 3(1), pages 77-</p>

Week	Date	Topic	Readings Due
			105, 09. + TBA
10	tba	Other Topics in Trade: Political Economy	Grossman, Gene, and Elhanan Helpman. "Protection for Sale." <i>American Economic Review</i> 84, no. 4 (1994): 833-50.  Goldberg, Pinelopi Koujianou and Giovanni Maggi. 1999. "Protection for Sale: An Empirical Investigation." <i>American Economic Review</i> . + TBA
11	tba	Other Topics in Trade: Distributional Effects	Autor, David H. David Dorn and Gordon H. Hanson. "Untangling Trade and Technology: Evidence from Local Labor Markets." NBER Working Paper (2013).  Haskel, Jonathan, Robert Z. Lawrence, Edward E. Leamer, and Matthew J. Slaughter. 2012. "Globalization and U.S. Wages: Modifying Classic Theory to Explain Recent Facts." <i>Journal of Economic Perspectives</i> , 26(2): 119-40.  Elhanan Helpman and Oleg Itskhoki and Stephen Redding, 2010. "Inequality and Unemployment in a Global Economy," <i>Econometrica</i> , Econometric Society, vol. 78(4), pages 1239-1283, 07.  Goldberg, Pinelopi Koujianou, and Nina Pavcnik. 2007. "Distributional Effects of Globalization in Developing Countries." <i>Journal of Economic Literature</i> , 45(1): 39-82. + TBA
12	tba	Other Topics in Trade: Trade and the Environment	Copeland, Brian R. and Taylor, M. Scott, 2005. "Free trade and global warming: a trade theory view of the Kyoto protocol," <i>Journal of Environmental Economics and Management</i> , Elsevier, vol. 49(2), pages 205-234, March.  Antweiler, Werner, Brian R. Copeland, and M. Scott Taylor. 2001. "Is Free Trade Good for the Environment?" <i>American Economic Review</i> , 91(4): 877-908. + TBA

### Late Work

Late submissions will not be accepted without a documented reason.

## **Electronic Device Policy**

Laptop computers should only be used to take notes on the margins of slides or other class-related activities. While the course material is interesting, it was not designed to compete with social media.

## **Attendance Policy**

While attendance is not enforced, students are expected to attend each class having read the assigned readings and ready to contribute to the discussion.

## **Institutional-required statements for undergraduate course outlines approved by Senate Undergraduate Council, April 14, 2009**

### **Academic Integrity**

In order to maintain a culture of academic integrity, members of the University of Waterloo community are expected to promote honesty, trust, fairness, respect and responsibility. See the [UWaterloo Academic Integrity webpage](#) and the [Arts Academic Integrity webpage](#) for more information.

### **Discipline**

A student is expected to know what constitutes academic integrity, to avoid committing academic offences, and to take responsibility for his/her actions. A student who is unsure whether an action constitutes an offence, or who needs help in learning how to avoid offences (e.g., plagiarism, cheating) or about “rules” for group work/collaboration should seek guidance from the course professor, academic advisor, or the Undergraduate Associate Dean. When misconduct has been found to have occurred, disciplinary penalties will be imposed under Policy 71 – Student Discipline. For information on categories of offenses and types of penalties, students should refer to [Policy 71 - Student Discipline](#). For typical penalties check [Guidelines for the Assessment of Penalties \(https://uwaterloo.ca/secretariat-general-counsel/policies-procedures-guidelines/guidelines/guidelines-assessment-penalties\)](https://uwaterloo.ca/secretariat-general-counsel/policies-procedures-guidelines/guidelines/guidelines-assessment-penalties).

### **Grievance**

A student who believes that a decision affecting some aspect of his/her university life has been unfair or unreasonable may have grounds for initiating a grievance. Read [Policy 70 - Student Petitions and Grievances](#), Section 4 (<https://uwaterloo.ca/secretariat-general-counsel/policies-procedures-guidelines/policy-70>). When in doubt, please be certain to contact the department’s administrative assistant who will provide further assistance.

### **Appeals**

A decision made or penalty imposed under Policy 70, Student Petitions and Grievances (other than a petition) or Policy 71, Student Discipline may be appealed if there is a ground. A student who believes he/she has a ground for an appeal should refer to [Policy 72, Student Appeals \(https://uwaterloo.ca/secretariat-general-counsel/policies-procedures-guidelines/policy-72\)](#).

### **Note for Students with Disabilities**

The [AccessAbility Services](#) office, located on the first floor of the Needles Hall extension (NH 1401), collaborates with all academic departments to arrange appropriate accommodations for students with disabilities without compromising the academic integrity of the curriculum. If you require academic



accommodations to lessen the impact of your disability, please register with the AS office at the beginning of each academic term.

## **Mental Health Support**

All of us need a support system. The faculty and staff in Arts encourage students to seek out mental health supports if they are needed.

### **On Campus**

Counselling Services: [counselling.services@uwaterloo.ca](mailto:counselling.services@uwaterloo.ca) / 519-888-4567 xt 32655

[MATES](#): one-to-one peer support program offered by Federation of Students (FEDS) and Counselling Services

Health Services Emergency service: located across the creek from Student Life Centre

### **Off campus, 24/7**

[Good2Talk](#): Free confidential help line for post-secondary students. Phone: 1-866-925-5454

Grand River Hospital: Emergency care for mental health crisis. Phone: 519-749-433 ext. 6880

[Here 24/7](#): Mental Health and Crisis Service Team. Phone: 1-844-437-3247

[OK2BME](#): set of support services for lesbian, gay, bisexual, transgender or questioning teens in Waterloo. Phone: 519-884-0000 extension 213

Full details can be found online at the Faculty of ARTS [website](#)

Download UWaterloo and regional mental health resources ([PDF](#))

Download the [WatSafe app](#) to your phone to quickly access mental health support information

## **Territorial Acknowledgement:**

We acknowledge that we are living and working on the traditional territory of the Attawandaron (also known as Neutral), Anishinaabeg and Haudenosaunee peoples. The University of Waterloo is situated on the Haldimand Tract, the land promised to the Six Nations that includes six miles on each side of the Grand River.

For more information about the purpose of territorial acknowledgements, please see the CAUT Guide to Acknowledging Traditional Territory ([PDF](#)).