

**Instructor:**

David Hummels

Office: RAWLS 4025;

web: [www.mgmt.purdue.edu/faculty/hummelsd](http://www.mgmt.purdue.edu/faculty/hummelsd)**Overview**

This course has two complementary purposes. One, we survey recent theoretical and empirical developments in international trade. Two, we work to develop a set of critical professional skills, including presentation, evaluation of others' research, and conception and development of new research ideas. Students will write a serious empirical term paper, and present it in class in the proposal and final stages. These papers consist of conceiving and motivating a research topic, developing a modeling and estimation strategy, and making efforts to collect data and estimate.

**Readings**

All journal article readings can be obtained through one of the following sources.

1. Journals in Management and Economics Library
2. Online resources (JSTOR or my website)

I have not put together a course packet given the small course enrollment. However, I would suggest that students coordinate in the reproduction of articles so everyone has a copy of all articles. You are responsible for ALL content listed in the syllabus (or subsequently announced in class).

**Required Work (and portion of final grade)**

- Actively participate in class discussion 20%
- Four brief paper critiques 20%
- Write a term paper 50%
- Present the term paper in proposal stage, and final version 10%

**Paper Critiques**

Each day we will **discuss** one, or perhaps two, papers from the syllabus. This class is about helping you make the transition from passive student to active scholar. It is therefore both boring and counterproductive for you to sit back and transcribe my lecture notes regarding each paper. Instead, we will be discussing these papers together. Of course, a necessary condition for you to discuss the paper is that you have first read it. To help you solve the time consistency problem, I'm going to have you turn in critiques of several papers.

**Details:** Length = about two pages, answering:

1. What is the main question the paper poses?
2. Why is that question important?
3. How is that question answered? Specifically,
  - a. modeling structure (key assumptions)
  - b. estimation approach (source of identification, estimator used)
  - c. data employed
4. Be constructively critical: What was convincing about the paper? What could be improved? What areas does it leave unexplored? What ideas for research of your own does this paper inspire?
5. Be prepared to discuss your summarized paper in class.

In several instances I will ask you to contrast two similar papers. The idea here is *\*not\** to have you copy down the abstract and conclusion or otherwise unthinkingly summarize the papers, but rather to think critically about them. The answers to questions 1,2 should take no more than a paragraph. The answer to question 3 should take another couple of paragraphs. The main thing I care about is the critique -- question 4.

## Term Papers

The most important part of this class is getting you going on dissertation research. Toward that end you will complete an original research paper. General guidelines

1. The paper must have empirical content (by which I mean econometric content, not a GTAP experiment).
2. Papers begun in other classes may be used with my explicit permission, but my expectations of final paper quality will be higher for these than for “new” papers.
3. Unfinished papers will not be accepted. If students are unable to finish the paper during the term, they will be required to take an incomplete, with a final deadline of June 1.

### *Deadlines:*

1. **Pre-term** – Meet with me to discuss topics of interest.
2. **Monday Feb 2.** Hand in a detailed summary of the proposed idea. During the week we will meet in person to discuss these ideas. In this meeting we will refine the proposal. We will address originality and feasibility, and identify potential data sources. Your paper idea must receive my approval before you can continue.
3. **Friday March 6.** Hand in a detailed proposal paper. Format: At least 6 pages, including substantial sections covering
  - A. introduction, motivation (what is the question, why is it important)
  - B. relevant literature (highlighting the gaps, and what your idea fills)
  - C. It is preferred at this point (but not required) to have made some progress on the paper’s methodology, including modeling structure, estimation approach, identification strategy, data employed.
4. **March 9-11.** Present proposal paper in class.
5. **April 27-29.** Present final paper in class during last week of class.
6. **Friday April 24.** Hand in final paper.

## Grading

Papers are assessed based on these criteria

1. Idea
  - a. Is there a workable idea in the paper?
  - b. Is this something that could develop into a paper that is publishable or worthy of inclusion in your dissertation?
  - c. How “new” or innovative is the idea?
  - d. Is the insight narrow or broadly applicable to an interesting set of problems?
2. Development
  - a. How far have you taken the idea?
  - b. Have you identified work in the literature that uses similar ideas that you can use as a springboard for your work?
  - c. Have you taken those ideas another step – modifying the approach, improving it?
  - d. Have you specifically identified the data you would use to address the problem?
  - e. Have you collected, used actual data?

**General Notes on Paper Presentations**

1. When preparing, ask yourself: what is the one thing I want this audience to remember from this paper? What is the one big idea? Everything you do should revolve around driving home that point and convincing them that it is true.
2. When putting an equation, graph, table, explanation, etc. into a presentation ask yourself: what does this add?
3. Know your audience. The way you motivate a paper, the detail in which you present it, and the points you emphasize should vary depending on the audience. If you are in a group that knows what is going on in a literature there is no need to rehash it. If they've seen similar model derivations many times, skip quickly through the familiar material.
4. Tailor the presentation to the presentation length. Academic presentations at conferences can be as short as 15 minutes; seminars can run 90 minutes or longer. Shorter presentations do not mean talking faster or covering the same material in a more superficial fashion.
5. Emphasize your contribution. This is especially true in very short seminars. If you only have 15 minutes to make your point, would you rather people remember what you did or what 5 other people did? That doesn't mean ignoring the previous literature – it can be useful to provide a single “contrast” slide: the departure in this paper is that I examine X, or I control for Y. In this case you aren't rehashing the literature for its own sake or trying to edify the audience on a literature they should know about. You are defining your own work in relation to others. This makes it easier for people who already know something about the literature to see more clearly where you're going.
6. Avoid footnotes, qualifications, tangents and detours. This is especially true in very short seminars. Stick to the main message. For longer seminars it might make sense to provide important qualifications or extensions, and that can be important so that the audience doesn't believe you are making overly strong statements. But be sparing in their use. Keep them in reserve to answer questions as they come.
7. Keep slide clutter to a minimum. A useful adage: one idea per slide.
8. Never put up a table with numbers or a graph unless you want the audience to see those numbers/graph and take something away from seeing them.
9. When you show regression results, emphasize three S things: sign, significance, and size. We focus a lot on the first two (is the sign what I expected/predicted; is it statistically significant). The third, sometimes called “economic significance”, is at least as important. Identifying a statistical correlation is less important if the effect is very small.
10. Never put up an equation unless you can say exactly what it means in words. This is the single best test of whether you understand your own work. That doesn't mean that you want to explain every equation, especially in short seminars. But you should be able to explain them if asked, and you should definitely explain “conclusion” equations – the ones that carry the punchline of your work.
11. If there is a lag between when you define a variable and when you get done using it, remind the audience what the variable is. This can be done either on a sideboard, in margin notes on the slide, or verbally. (I like margin notes)
12. Be enthusiastic about your work. If you aren't, nobody else will be. Closely related to this: don't apologize. You have what you have. If you don't like it, do better next time. In the meantime, emphasize what you do have, and convince the audience why that's worth listening to.

**Schedule of Topics and Readings:**

Week	Dates	Topic and Papers
1	Jan 12  Jan 14-16	<p><b>Review: the Basic Monopolistic Competition Model</b></p> <p>Krugman, Paul. 1980. "Scale Economies, Product Differentiation, and the Pattern of Trade." <i>American Economic Review</i>, 70, pp. 950-59.</p> <p><b>Gravity applications: trade growth and trade costs</b></p> <p>Baier, Bergstrand, "The Growth of World Trade: Tariffs, Transport Costs, and Income Similarity," <i>Journal of International Economics</i>, Vol. 53, No. 1, Feb 2001, 1-27</p> <p>James Rauch, "Networks versus markets in international trade", <i>JIE</i> 48 (1999) p. 7-35.</p> <p><i>Optional:</i> McCallum, "National Borders Matter" <i>AER</i> (1995) 615-623</p> <p>Anderson &amp; Vanwincoop "Gravity with Gravitas: A Solution to the Border Puzzle" <i>AER</i> March 2003, p. 170-192.</p> <p>Rauch and Trinidad, "Ethnic Chinese Networks in International Trade" <i>Review of Economics and Statistics</i>, February 2002.</p>
2	Jan 21  Jan 23	<p><b>Gravity as an instrument (critique due)</b></p> <p>(* Redding, Venables, Economic geography and international inequality, <i>Journal of International Economics</i>, 62 (2004), 53-82.</p> <p>Jeffrey A. Frankel; David Romer, "Does Trade Cause Growth?" <i>The American Economic Review</i>, Vol. 89, No. 3. (Jun., 1999), pp. 379-399.</p> <p><b>Trade Costs: Other approaches</b></p> <p>Hummels, "Transportation Costs and International Trade In the Second Era of Globalization", <i>Journal of Economic Perspectives</i> 21 (2007) pp. 131-154.</p> <p>Hummels, Schaur, "Time as a Trade Barrier" mimeo. (see my website)</p>
3	Jan 26-28	<b>No class: work intensively on paper proposals (due on Feb 2)</b>
4	Feb 2	<p><b>Endogenous Trade Costs:</b></p> <p>Hummels, Lugovskyy, Skiba "The Trade Reducing Effects of Market Power in International Shipping" forthcoming <i>Journal of Development Economics</i> (see website)</p> <p><i>Optional:</i> Trefler, Trade Liberalization and the Theory of Endogenous Protection: An Econometric Study of U.S. Import Policy" <i>JPE</i> (Feb., 1993), pp. 138-160.</p> <p>Goldberg-Maggi, "Protection for Sale, an Empirical Investigation" <i>AER</i> 1999, 1135-1155.</p>

	Feb 4-6	<p><b>Trade in Intermediate Goods (critique due)</b></p> <p>(*) Yi “Can Vertical Specialization Explain the Growth in World Trade” <i>Journal of Political Economy</i> 111 (2003).</p> <p>Hillberry, Hummels, “Trade Responses to Geographic Frictions: A Decomposition Using MicroData”, <i>European Economic Review</i> 52 (2008) pp. 527-550.</p> <p>Optional: Hummels, Ishii, Yi, "The Nature and Growth of Vertical Specialization in World Trade", <i>Journal of International Economics</i>, 54 (2001).</p>
5	Feb 9, 11, 13	<p><b>The extensive margin in trade (critique due)</b></p> <p>Romer, “New Goods, Old Theory and the Welfare Costs of Trade Restrictions” <i>J Development Economics</i>, 1994.</p> <p>(*) Robert C. Feenstra, “New Product Varieties and the Measurement of International Prices” <i>The American Economic Review</i>, Vol. 84, No. 1. (Mar., 1994), pp. 157-177.</p> <p>Hummels and Klenow, “The Variety and Quality of Nation’s Exports” <i>American Economic Review</i>, 95 (2005) 704-723</p> <p>Optional: Christian Broda, David Weinstein, “<a href="#">Globalization and the Gains from Variety</a>,” <i>Quarterly Journal of Economics</i>, Volume 121, Issue 2 - May 2006</p> <p>Feenstra et al, “Testing Endogenous Growth in South Korea and Taiwan,” <i>Journal of Development Economics</i>, 60, 1999, 317-341</p> <p>Feenstra and Kee “On the Measurement of Product Variety in Trade,” <i>American Economic Review, Papers and Proceedings</i>, 94(2), May 2004, 145-149</p>
6	Feb 16, 18,20	<p><b>Firm Heterogeneity (critique due)</b></p> <p>Bernard, Jensen, Redding, Schott, “Firms in International Trade” <i>JEP</i> 2007</p> <p>Melitz, Marc, The impact of trade on intra-industry reallocations and aggregate industry productivity <a href="#">Econometrica</a>. Nov 2003. Vol.71, Iss. 6; pg. 1695</p> <p>(*) Yeaple, “<a href="#">A Simple Model of Firm Heterogeneity, International Trade, and Wages</a>” (<i>Journal of International Economics</i>, January 2005)</p> <p>Helpman, Melitz, Yeaple, “<a href="#">Exports vs. FDI with Heterogeneous Firms</a>” <i>American Economic Review</i>, March 2004)</p>
7	Fe 23, 25, 27	<p><b>Firm Heterogeneity Extensions &amp; Evidence</b></p> <p>Bernard, Redding, Schott, "Comparative Advantage and Heterogeneous Firms" <i>Review of Economic Studies</i> 2007, vol 74, pp. 31-66.</p> <p>Melitz &amp; Ottaviano, "Market Size, Trade and Productivity" <i>Review of Economic Studies</i> 2007 vol 75, pp. 295-316.</p> <p>Bernard, Redding, Schott, "Multi product Firms &amp; Trade Liberalization" NBER 12782</p>

		<p>Nguyen &amp; Munch, "Decomposing Firm Level Sales Variation" (see website)</p> <p>Nguyen "Demand Uncertainty and Exporting Failures" (see website)</p> <p><i>Optional:</i> Eaton, Kortum, and Kramarz, "Dissecting Trade: Firms, Industries and Export Destinations" NBER 10344</p> <p>Arkolakis, "Market Penetration Costs and the New Consumers Margin in International Trade" NBER 14214</p>
8	March 2, 4,6	<p><b>Quality and Trade</b></p> <p>Flam and Helpman, "Vertical Product Differentiation and North-South Trade" AER 77(5), December 1987, pages 810-22.</p> <p>Schott, "Across-Product versus Within-Product Specialization in International Trade. Quarterly Journal of Economics 119(2):647-678.</p> <p>Choi, Hummels, Xiang, "Explaining Import Variety and Quality: The Role of the Income Distribution" mimeo (see website)</p> <p>Hummels, Skiba, "Shipping the Good Apples Out: An Empirical Confirmation of the Alchian-Allen Conjecture" <i>Journal of Political Economy</i> 112 (2004) 1384-1402.</p> <p>Verhoogen, "<a href="#">Trade, Quality Upgrading and Wage Inequality in the Mexican Manufacturing Sector.</a>" <i>Quarterly Journal of Economics</i>, vol. 123, no. 2, May 2008, pp. 489-530.</p> <p><i>Optional:</i> Hallak, J. C., 2006, Product Quality and the Direction of Trade, <i>Journal of International Economics</i>, 68 (1) pp. 238-265.</p> <p>Bils, Klenow 2001 "Quantifying Quality Growth" American Economic Review 91(4).</p> <p>Baldwin, Harrigan, "Zeros, Quality and Space: Trade Theory and Trade Evidence" NBER 13214</p> <p>Kugler-Verghoogen, "The Quality Complementarity Hypothesis: Evidence from Colombia" NBER 14418</p>
9	March 9-11	<b>Proposal Paper Presentations</b> (Proposal paper due March 6)
	March 16- April 22	No Class Meetings: work intensively on your papers, schedule meetings with me as needed.
	April 27,29	<b>Paper Presentations</b>