#### EC 607: SEMINAR IN INTERNATIONAL TRADE

# Tuesdays and Thursdays 12:00 – 1:50 pm, PLC 412

Instructor: Anca CRISTEA

Office: PLC 514 Office Hours: by appointment E-mail: cristea@uoregon.edu Course Website: Canvas

#### **Course Description**

This is a graduate level seminar in international trade. The course is designed to introduce you to recent theoretical and empirical developments in the field. The first part of the course will focus on theories of trade, and their quantitative implications. In the second part we will use these modeling frameworks to investigate trade topics.

This course has two purposes. One is to get you familiar with recent models, data and quantitative methodologies that are commonly used in international trade. Second is to help you develop skills that will prepare you for doing research in this or other fields. Towards this goal, you will have to discuss and critically assess others' research work, as well as develop and present your own research ideas.

#### Readings

The required readings for this course are journal articles listed below each topic and marked with star (\*). They will be discussed extensively during class. The reading list is subject to revisions, but the required readings will be announced a week in advance. Un-starred readings are optional.

Useful Texts in International Trade:

Feenstra, Robert. "Advanced International Trade: Theory and Evidence", Princeton, Princeton University Press, 2004.

Helpman, E. and P. Krugman. "Market Structure and Foreign Trade: Increasing Returns, Imperfect Competition, and the International Trade", Cambridge, MIT Press, 1995.

Grossman, G.M. and K. Rogoff (eds.). "Handbook of International Economics, Vol. 3", North Holand, 1995.

Helpman, E., Marin, D., and T. Verdier (eds). "The Organization of Firms in a Global Economy", Harvard University Press, 2008.

# Course Requirements & Grading: <u>Due Dates:</u>

Class participation & paper critiques (x2)	15%	
Written assignments (x2)	20%	October 22 <sup>nd</sup> ; November 21 <sup>st</sup>
Term Paper Proposal	10%	October 24 <sup>th</sup> (week 4)
Term Paper	35%	December 5 <sup>th</sup> (week 10)
Class Presentations (x2)	20%	During the term + week 10

#### Class Participation and Paper Critiques:

In each class we will be discussing at length research articles, so class participation will depend primarily on you doing the assigned readings before class. For two of the required readings (to be discussed in class) you are asked to provide a <u>one-page critical analysis</u> of the papers' research ideas. You can choose any two papers from the list of required readings, and the critique must be turned in <u>by 5pm the evening</u> <u>before</u> the class assigned to that reading.

#### Written Assignments: Referee report & Data replication exercise

There will be two written assignments given during the length of the course. One assignment will be a data replication exercise. For this, you will be given the necessary data and specific references to tables and figures in the assigned paper that you will have to replicate.

The second assignment will be a referee report. A referee report is a critical assessment of an unpublished paper that is submitted for publication at a peer-reviewed journal. It is an activity solicited by a journal editor and is intended to help the editor decide whether or not to pursue the paper for publication.

A typical referee report is 2-4 pages (single spaced), and has the following general structure. The first few paragraphs should summarize the paper for the editor (putting it into context), describe the main model/estimation features of the paper and highlight its strengths and original contributions. The body of the report should be a critical analysis of the paper. Comments may be organized in paragraphs or in list form, and should discuss the paper's weaknesses. Where possible, you should propose directions on how the author(s) could address the identified weaknesses, as well as make recommendations for changes that would improve the paper. Comments are generally organized based on their importance for the overall quality of the paper, from major concerns to minor points.

You will be provided a list of working papers to choose from. If you have a strong preference for a particular *unpublished* paper that is not included in the reference list, please consult with me in advance.

#### Term paper and Paper proposal:

A requirement for this course is to write a term paper on a trade-related topic of your choice, decided in consultation with me. There are *three* options for the paper:

- (1). a comprehensive analysis of the existing literature that identifies unresolved research questions (must have at least 15 references published in academic journals);
- (2). an original paper that presents a novel research idea and derives some preliminary theoretical and/or empirical results; or
- (3). an empirical analysis *replicating and extending* the results of an influential trade paper (chosen in consultation with me).

In either case, the term paper must show <u>your thinking</u> and analysis of the topic/idea and provide a concrete avenue and <u>suggestions for future research</u>. More detail on each option will be given in class. The term paper is due the last day of class (**December 5**<sup>th</sup> by 5pm).

A written <u>one-page proposal</u> (1-inch margins, 12-font) framing the research question or topic chosen for the term paper must be submitted by the end of week 4 of classes (**October 24**<sup>th</sup> by 5pm). Please schedule a meeting with me before or immediately after the submission of the proposal to discuss it.

#### Paper Presentations:

Each student will complete two presentations during the class. The first presentation will be 15 to 20 minutes long and will cover a published paper that is already assigned in the syllabus. The presentation will take place at the beginning of class time and the slides will have to be sent to me before class. The second presentation will be a 30-minute in-class presentation of your term paper. Suggestions on the structure and focus of each presentation will be provided in class.

# **Course Outline and Readings**

# **Tentative Class Schedule**

Date	Assigned Reading	
10/1	Course logistics + Intro to International Trade	
10/3	Feyrer, James, 2019. "Trade and Income – Exploiting Time Series in Geography", <i>AEJ Applied</i> , forthcoming.	
10/8	<b>Student presentation</b> : Costinot and Donaldson, 2012. "Ricardo's Theory of Comparative Advantage: Old Idea, New Evidence", <i>AER: Papers and Proceedings</i> 102, 453-458.	
	Dornbusch, R, S. Fischer and P.A. Samuelson, 1977. "Comparative Advantage, Trade and Payments in a Ricardian Model with a Continuum of Goods", <i>American Economic Review</i> 823-839.	
10/10	Krugman, P., 1980. "Scale Economies, Product Differentiation and the Pattern of Trade", <i>American Economic Review</i> 70, 950-959.	
10/15	Student presentation: Bernard, A. and B. Jensen, 1999. "Exceptional Exporter Performance: Cause, Effect or Both?", Journal of International Economics 47: 1-25.	
10/17	Melitz, M., 2003. "The Impact of Trade on Intra-Industry Reallocations and Aggregate Industry Productivity", <i>Econometrica</i> 71, 1695-1725.	
10/22	<b>Student presentation:</b> Trefler, D., 2004. "The Long and Short of the Canada-U.S. Free Trade Agreement", <i>American Economic Review</i> 94, 870-895.	
	Pavcnik, N., 2002. "Trade Liberalization, Exit and Productivity Improvements: Evidence from Chilean Plants", <i>Review of Economic Studies</i> 69, 245-276.	
10/24	Bustos, P., 2011. "Trade Liberalization, Exports and Technology Upgrading: Evidence on the Impact of MERCOSUR on the Argentinean Firms", <i>American Economic Review</i> 101, 304-340.	
10/29	<b>Student presentation:</b> Fort, Teresa, Justin Pierce and Peter Schott, 2018. "New Perspectives on the Decline of US Manufacturing employment", <i>Journal of Economic Perspectives</i> 32, 47-72.	
	Autor, D., D. Dorn and G. Hanson, 2013. "The China Syndrome: Local Labor Market Effects of Import Competition in the United States", <i>American Economic Review</i> 103(6): 2121-2168.	
10/31	Dix-Carneiro, Rafael, and Brian K. Kovak. 2017. "Trade Liberalization and Regional Dynamics." <i>American Economic Review</i> , 107 (10): 2908-46.	
11/5	Hummels, D., Jørgensen, R., Munch, J., and Xiang, C. 2014. "The Wage Effects of Offshoring: Evidence from Danish Matched Worker-Firm Data", <i>American Economic Review</i> 104(6), 1597-1629.	

11/7	<ul> <li>Student presentation: Feenstra, Robert and Gordon Hanson, 1997. "Foreign Direct Investment and Relative Wages: Evidence from Mexico's Maquiladoras" Journal of International Economics 42, 371-393.</li> <li>Verhoogen, E., 2008. "Trade, Quality Upgrading and Wage Inequality in the Mexican Manufacturing Sector", Quarterly Journal of Economics 123, 489-530.</li> </ul>
11/12	Student presentation: Brainard, Lael, 1997. "An Empirical Assessment of the Proximity-Concentration Tradeoff Between Multinational Sales and Trade", American Economic Review 87, 520-544.
	Helpman, E., Melitz, M. and S. Yeaple, 2004. "Exports versus FDI with Heterogeneous Firms", <i>American Economic Review</i> 94, 300-316.
11/14	Student presentation: Costino, Arnaud, Lindsay Oldenski and James Rauch, 2011. "Adaptation and the Boundary of the Firm" Review of Economics and Statistics 93, 298-308.
	Antras, P., 2003. "Firms, Contracts and Trade Structure", <i>Quarterly Journal of Economics</i> 118, 1375-1418.
11/19	Keller, Wolfgang and Stephen Yeaple, 2013. "The Gravity of Knowledge", <i>American Economic Review</i> 103(4), 1414-1444.
11/21	Student presentation: Aitken, Brian and Ann Harrison, 1999. "Do Domestic Firms benefit from Foreign Direct Investment? Evidence from Venezuela", American Economic Review 89, 605-618.
	Javorcik, B. S., 2004. "Does Foreign Direct Investment Increase the Productivity of Domestic Firms? In Search of Spillovers through Backward Linkages", <i>American Economic Review</i> , 605-627.
11/26	TBA
11/28	No class (Thanksgiving Break)
12/03	Student Presentations (schedule subject to change)
12/05	Student Presentations (schedule subject to change)

### **Detailed Reading List**

### I. The Gravity Equation

(\*) Feyrer, James, 2019. "Trade and Income – Exploiting Time Series in Geography", *AEJ Applied*, forthcoming.

Feyrer, James, 2009. "Distance, Trade and Income – The 1967 to 1975 Closing of the Suez Canal as a Natural Experiment", NBER working paper 15557.

Baier, S. and J. Bergstrand, 2001. "The growth of world trade: tariffs, transport costs, and income similarity", *Journal of International Economics* 53, 1-27.

- Rauch, J. and V. Trindade, 2002. "Ethnic Chinese Networks in International Trade", *Review of Economics and Statistics* 84, 116-130.
- Anderson, J. E., 1979. "A Theoretical Foundation of the Gravity Equation", *American Economic Review* 69, 106-116.

#### **Empirical Applications of Gravity: Border Puzzle**

McCallum, J., 1995. "National Borders Matter", *American Economic Review* 85, 615-623. Anderson, J. and E. van Wincoop, 2003. "Gravity with Gravitas: A Solution to the Border Puzzle", *American Economic Review* 93, 170-192.

#### **Empirical Applications of Gravity: Trade Costs**

- Hummels, D., Lugovskyy, V., & Skiba, A. (2009). "The trade reducing effects of market power in international shipping", *Journal of Development Economics* 89, 84-97.
- Atkin, D. and D. Donaldson, 2014. "Who's Getting Globalized? Implications of Intranational Trade Costs", Yale University, mimeo.
- Hummels, D. and R. Hillberry, 2008. "Trade Responses to Geographic Frictions: A Decomposition Using MicroData", *European Economic Review* 52, 527-550.
- Anderson, James, 2001. "Trade Costs", Journal of Economic Literature 42, 691-751.
- Rauch, J., 1999. "Networks versus Markets in International Trade", *Journal of International Economics* 48, 7-35.

#### II. Neoclassical Models of Trade: the Ricardian Model of Trade

Feenstra, Robert C. *Advanced International Trade: Theory and Evidence*, Chapter 1, pp. 1-4. (\*) Dornbusch, R, S. Fischer and P.A. Samuelson, 1977. "Comparative Advantage, Trade and Payments in a Ricardian Model with a Continuum of Goods", *American Economic Review* 823-839.

Eaton, J., and S. Kortum, 2002. "Technology, Geography, and Trade" *Econometrica*, 70(5), 1741-1779.

Matsuyama, K., 2008, "Ricardian Trade Theory" in the New Palgrave Dictionary of Economics.

#### **Evidence for the Ricardian Model**

Costinot, A., D. Donaldson, and I. Komunjer, 2011. "What goods do countries trade? A quantitative exploration of Ricardo's ideas." *The Review of economic studies* 79, 581-608. Costinot, Arnaud and Dave Donaldson, 2012. "Ricardo's Theory of Comparative Advantage: Old Idea, New Evidence", *AER: Papers and Proceedings* 102, 453-458. Chor, Davin. "Unpacking Sources of Comparative Advantage: A Quantitative Approach."

Journal of International Economics 82.2 (2010): 152-167.

# III. Monopolistic Competition Model and Applications

# **Basic Monopolistic Competition Model of Trade**

- (\*) Krugman, P., 1980. "Scale Economies, Product Differentiation and the Pattern of Trade", *American Economic Review* 70, 950-959.
- Krugman, P., 1979. "Increasing Returns, Monopolistic Competition and International Trade", *Journal of International Economics* 9, 469-479.
- Krugman, P. (1995). "Increasing Returns, Imperfect Competition and the Positive Theory of International Trade", *Handbook of International Economics* Vol. 3, Chapter 24.
- Feenstra, R. (2004). Advanced International Trade. Theory and Evidence. Chapter 5.
- Helpman, H., and P. Krugman, 1985, Market Structure and Foreign Trade, MIT Press, Ch. 6-9.

#### **Evidence for Monopolistic Competition Model**

- Hummels, D. and J. Levinsohn, 1995. "Monopolistic Competition and International Trade: Reinterpreting the Evidence", *Quarterly Journal of Economics* 110, 799-836.
- Helpman, Elhanan, 1987. "Imperfect Competition and International Trade: Evidence from Fourteen Industrial Countries", *Journal of Japanese and International Economies* 1, 62-81.
- Hanson, G. and C. Xiang, 2004. "The Home Market Effect and Bilateral Trade Patterns", *American Economic Review* 94, 1108-1129.

#### IV. Firm Heterogeneity Models

#### **Basic Facts**

- Bernard, A. and B. Jensen, 1999. "Exceptional Exporter Performance: Cause, Effect or Both?", *Journal of International Economics* 47: 1-25.
- Bernard, A. and B. Jensen, 2004. "Why Some Firms Export?", *Review of Economics and Statistics* 86, 561-569.
- De Loecker, J., 2007. "Do Exports Generate Higher Productivity? Evidence from Slovenia", *Journal of International Economics* (73), 69-98.
- Bernard, A., Jensen, B., Redding, S. and P. Schott, 2007. "Firms in International Trade", *Journal of Economic Perspectives* 21, 105-130.

#### **Theoretical Models of Firm Heterogeneity**

- (\*) Melitz, M., 2003. "The Impact of Trade on Intra-Industry Realocations and Aggregate Industry Productivity", *Econometrica* 71, 1695-1725.
- Chaney, T., 2005. "Distorted Gravity: Heterogeneous Firms, Market Structure and the Geography of International Trade", *American Economic Review* 98, 1707-1721.
- Yeaple, Stephen, 2005. "A simple model of firm heterogeneity, international trade, and wages." *Journal of international Economics* 65, 1-20.
- Bernard, A., Redding S., and P. Schott, 2004. "Comparative Advantage and Heterogeneous Firms", *Review of Economic Studies* 74, 31-66.
- Melitz, M. and G. Ottaviano, 2008. "Market Size, Trade and Productivity", *Review of Economic Studies* 295-316.
- Eaton, J. and S. Kortum, 2002. "Technology, Geography and Trade", *Econometrica* 70, 1741-1780
- Bernard, A., Eaton, J., Jensen, B., Kortum, S., 2003. "Plants and Productivity in International Trade", *American Economic Review* 93, 1268-1290.

#### **Empirics on Firms Heterogeneity: New Margins of Trade**

- Helpman, E., Melitz, M. and Y. Rubinstein, 2008. "Estimating Trade Flows: Trading Partners and Trading Volumes", *Quarterly Journal of Economics* 123, 441-487.
- Roberts, M. and J. Tybout, 1997. "The Decision to Export in Columbia: An Empirical Model with Sunk Costs", *American Economic Review* 87, 545-564.
- Eaton, J., Kortum, S. and F. Kramarz, 2004. "Dissecting Trade: Firms, Industries and Export Destinations", *American Economic Review P&P* 94(2), 150-154.
- Arkolakis, C., 2010. "Market Penetration Costs and the New Consumers Margin in International Trade", *Journal of Political Economy*, forthcoming.

### V. Topics: Distributional consequences of trade

#### **Industry Reallocations**

- (\*) Pavnckic, N., 2002. "Trade Liberalization, Exit and Productivity Improvements: Evidence from Chilean Plants", *Review of Economic Studies* 69, 245-276.
- (\*) Bustos, P., 2011. "Trade Liberalization, Exports and Technology Upgrading: Evidence on the Impact of MERCOSUR on the Argentinean Firms", *American Economic Review* 101, 304-340.
- (\*) Dix-Carneiro, Rafael, and Brian K. Kovak. 2017. "Trade Liberalization and Regional
- Dynamics." *American Economic Review*, 107 (10): 2908-46. Amiti, M. and J. Konings, 2007. "Trade Liberalization, Intermediate Inputs and Productivity: Evidence from Indonesia", *American Economic Review* 97(5), 1611-1638.
- Trefler, D., 2004. "The Long and Short of the Canada-U.S. Free Trade Agreement", *American Economic Review* 94, 870-895.

#### **Labor Market Effects**

- (\*) Autor, D., D. Dorn and G. Hanson, 2013. "The China Syndrome: Local Labor Market Effects of Import Competition in the United States", *American Economic Review* 103(6): 2121-2168.
- (\*) Hummels, D., Jørgensen, R., Munch, J., and Xiang, C. 2014. "The Wage Effects of Offshoring: Evidence from Danish Matched Worker-Firm Data", *American Economic Review* 104(6), 1597-1629.
- (\*) Verhoogen, E., 2008. "Trade, Quality Upgrading and Wage Inequality in the Mexican Manufacturing Sector", *Quarterly Journal of Economics* 123, 489-530.
- Harrigan, J., A. Reshef and F. Toubal, 2016. "The March of the Techies: Technology, Trade and Job Polarization in France, 1994-2007", NBER wp 22110.
- Goos, M., A. Manning, and A. Salomons. "Explaining Job Polarization: Routine-Biased Technological Change and Offshoring." *The American Economic Review* 104.8 (2014): 2509-26.

#### VI. Topics: Multinational Firms

#### Firms and Decision to Invest Abroad

- (\*) Helpman, E., Melitz, M. and S. Yeaple, 2004. "Exports versus FDI with Heterogeneous Firms", *American Economic Review* 94, 300-316.
- Brainard, L., 1997. "An Empirical Assessment of the Proximity-Concentration Trade-off Between Multinational Sales and Trade", *American Economic Review* 87, 520-544.
- Conconi, P., A. Sapir, and M. Zanardi, 2016. "The Internationalization Process of Firms: from Exports to FDI", *Journal of International Economics* 99, 16-30.
- Yeaple, S., 2003. "The Role of Skill Endowments in the Structure of U.S. Outward Foreign Direct Investment", *Review of Economics and Statistics* 85, 726-734.
- Hanson, G., Mataloni, R., and Slaughter, M., 2005. "Vertical Production Networks in Multinational Firms", *Review of Economics and Statistics* 87, 664-678.
- Blonigen, B. and J. Piger, 2011. "Determinants of Foreign Direct Investment", University of Oregon, mimeo.
- Helpman, E., 1984. "A Simple Theory of International Trade with Multinational Corporations", *Journal of Political Economy* 92, 451-471.
- Markusen, J., and A. Venables, 2000. "The theory of endowment, intra-industry and multinational trade", *Journal of International Economics* 52, 209-234.

#### **Boundaries of the Firm**

- (\*) Antras, P., 2003. "Firms, Contracts and Trade Structure", *Quarterly Journal of Economics* 118, 1375-1418.
- Antras, P., E., Helpman, 2004. "Global Sourcing", Journal of Political Economy 112, 552-580.

- Grossman, G. and E. Helpman, 2002. "Integration vs. Outsourcing in Industry Equilibrium", *Quarterly Journal of Economics* 117, 85-120.
- Yeaple, S., 2006. "Foreign Direct Investment and the Structure of U.S. Trade", *Journal of the European Economic Association* 4, 602-611.
- Costinot, A., Oldensky, L, and J. Rauch, 2009. "Adaptation and the Boundaries of the Multinational Firms", *Review of Economics and Statistics* 93, 298-308.
- Nunn, N. and D. Trefler, 2008. "The Boundaries of the Multinational Firm: An Empirical Analysis", in E. Helpman, D. marin and T. Verdier (Eds.), *The Organization of Firms in a Global Economy*, Harvard University Press.

#### **Offshoring**

- (\*) Keller, Wolfgang and Stephen Yeaple, 2013. "The Gravity of Knowledge", *American Economic Review* 103(4), 1414-1444.
- Grossman, G. and E. Rossi-Hansberg, 2008. "Trading Tasks: A Simple Theory of Offshoring", *American Economic Review* 98, 1978-1997.
- Feenstra, R. and G. Hanson, 1999. "The Impact of Outsourcing and High-Technology Capital on Wages", *Quarterly Journal of Economics* 114, 907-940.
- Yi, K. M., 2003. "Can Vertical Specialization Explain the Growth of World Trade?", *Journal of Political Economy*, 111:1, 52-102.

#### **FDI Spillovers**

- (\*) Javorcik, B. S., 2004. "Does Foreign Direct Investment Increase the Productivity of Domestic Firms? In Search of Spillovers through Backward Linkages", *American Economic Review*, 605-627.
- Aitken, B. J., and A. Harrison, 1999. "Do Domestic Firms Benefit from Direct Foreign Investment? Evidence from Venezuela" *American Economic Review*, 605-618.

#### VII. Other Topics

#### **Institutional and Market Frictions in International Trade**

- Manova, K., 2011. "Credit Constraints, Heterogeneous Firms and International Trade", Stanford University, mimeo.
- Nunn, N., 2007. "Relationship-Specificity, Incomplete Contracts and the Pattern of Trade", *Quarterly Journal of Economics* 122, 569-600.

#### **Environment and Trade**

- Forslid, R., T. Okubo and K. H. Ulltveit-Moe, 2015. "Why are Firms that Export Cleaner? International Trade, Abatement and Environmental Emissions", University of Oslo, mimeo.
- Barrows, J. and H. Ollivier, 2016. "Emission Intensity and Firm Dynamics: Reallocation, Product Mix and Technology in India", w.p. 245, Grantham Research Institute on Climate Change and the Environment.
- Bombardini, M. and B. Li, 2016. "Trade, Pollution and Mortality in China", University of British Columbia, mimeo.

#### Health/Labor/Gender and Trade

- Juhn, C., G. Ujhelyi, and C. Villegas-Sanchez, 2014. "Men, women, and machines: How trade impacts gender inequality", *Journal of Development Economics* 106, 179-193.
- McManus, T. C. and G. Schaur, 2016. "The Effect of Import Competition on Worker Health", *Journal of International Economics* 102, 160-172.

Boler, E. A., B. Javorcik, K. H. Ulltveit-Moe, 2018. "Working across Time Zones: Exporters and the Gender Wage Gap", *Journal of International Economics* 111, 122-133.

# **Economic Geography and Trade**

Redding, S., and A. J. Venables, 2004. "Economic Geography and International Inequality" *Journal of International Economics*. 62, 53-82.

Cosar, A. K., and Pablo D. Fajgelbaum. 2016. "Internal Geography, International Trade, and Regional Specialization." *American Economic Journal: Microeconomics* 8, 24-56.