# ECO 7707: International Economic Relations Syllabus

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Office Hours: Thursdays, 10-11:30 via Zoom

Class Meeting Times: Mondays & Wednesdays, 7th/8th period (1:55 - 3:50)

Room: MAT 114

# Course Description

This course is an introduction to empirical international trade on the graduate level. The course will introduce students to empirical facts and data related to trade, international prices, and firms. We will cover models and techniques that allow researchers to bring trade theory to the data and to evaluate trade policies quantitatively. The final goal is to become familiar with the recent literature in the field.

# Course Requirements, Homework, and Grading

The main requirements are a midterm (20 %) and a final exam (30 %) as well as homeworks and presentations (50 %). The homeworks are especially important and will ask you to apply the models and techniques covered in class to trade data in a hands-on fashion. This serves the purpose of enhancing the understanding of the theory and learn how to actually do research in international trade and in general. It will also refresh and improve your coding skills.

In the last three lectures of the course, to give you an additional sense of the frontier in the field, I ask each of you choose and to present a paper related to international trade that has been published in a top 5 journal (American Economic Review, Quarterly Journal of Economics, Journal of Political Economy, Econometrica, Review of Economic Studies) since 2013. The presentations should be about 40-45 minutes long and give an in-depth description of the paper as well as point out its contribution. It cannot be a paper that we covered (in detail) in class.

# **Topics**

#### Part 1: Course Introduction, Data, and the Gravity Equation

Lectures 1-2 (Jan 5, 10)

- Course Introduction
- Data Sources in international trade and collecting data with R
- The Gravity Equation

#### Part 2: New Trade Models, Firms and International Trade

Lectures 3-5 (Jan 12, 19, 24)

- Technology and International Trade: The Eaton, Kortum model
- Productivity and Imperfect Competition: The Melitz Model
- Introduction to estimating structural trade models
- Facts on Firms that trade

#### Readings:

- 1. Eaton, Kortum (2002)
- 2. Melitz (2003)
- 3. Bernard, Jensen, Schott (2009)

#### Homework 1: Data Collection and the Gravity Equation (due Jan 24)

#### Part 3: Trade, Offshoring, and Labor Markets

Lectures 6 - 8 (Jan 26, Jan 31, Feb 2)

- Trade and Inequality in the U.S.
- Import Competition and the Labor Market: Autor, Dorn, and Hanson (2013)
- Offshoring: Hummels, Jorgensen, Munch, and Xiang (2014)
- Routine Occupations: Autor, Levy, and Murnane (2003)

#### Readings:

- 1. Autor, Dorn, and Hanson (2013)
- 2. Hummels, Jorgensen, Munch, and Xiang (2014)
- 3. Autor, Levy, and Murnane (2003)

#### Homework 2 - Simulation in Trade Models: Eaton-Kortum (due Feb 4)

#### Part 4: Trade Costs

Lectures 9 - 10 (Feb 7, 9)

- How important is transportation infrastructure?
- Endogenous trade costs

#### Readings:

- 1. Donaldson (2018)
- 2. Brancaccio, Kalouptsidi, Papageorgiou (2018)

#### Part 5: Trade, Competition and Markups

Lectures 11 - 13 (Feb 14, 16, 21)

- An Introduction to GMM
- Market Power and Markups
- Trade with endogenous markups: Melitz and Ottaviano
- Measuring Markups and structural production function estimation

#### Readings:

- 1. Melitz, Ottaviano (2008)
- 2. De Loecker and Warzynski (2012)

#### Homework 3 - Simulation in Trade Models: The Melitz-Model (due Feb 21)

#### Midterm: Lecture 14 (Feb 23)

#### Part 6: The Gains from Trade

Lectures 15 - 16 (Feb 28, Mar 2)

- How big are the gains from trade?
- Measuring the gains from trade and variety

#### Readings:

- 1. Arkolakis, Costinot, Rodriguez-Clare (2012)
- 2. Feenstra (1994)
- 3. Broda and Weinstein (2006)

#### Part 7: Vertical and Horizontal Differentiation

Lectures 17 - 18 (Mar 14, 16)

- Cross-country differences in quality
- Product differentiation, strategy and trade

- Estimating product quality in the data

#### Readings:

- 1. Verhoogen (2008)
- 2. Khandelwal (2010)

# Homework 4 - Structural Estimation: Feenstra Method and Gains from Trade (due Mar 16)

#### Part 8: Entry, Entry Games, and Selection in Trade

Lectures 19 - 20 (Mar 21, 23)

- How do firms enter?
- Sequential Entry
- Structural Estimation of Entry Games

#### Readings:

- 1. Jia (2008)
- 2. Antras, Fort, and Tintelnot (2017)
- 3. Morales, Sheu, Zahler (2017)

#### Homework 5 - Structural Estimation of Entry Games (due Mar 25)

#### Part 9: Tariffs and the political consequences of international trade

Lectures 21 - 22 (Mar 28, 30)

- Insights from the 2018-19 Trade War
- Trade and political polarization

#### Readings:

- 1. Fajgelbaum, Goldberg, Kennedy, and Khandelwal (2019)
- 2. Autor, Dorn, Hanson, and Majlesi (2017)

#### Part 10: Other Topics

Lectures 23 - 24 (Apr 4, 6)

- Immigration and the labor market
- Trade and Climate Change

#### Readings:

1. Peri, Shih, Sparber (2015)

2. Costinot, Donaldson, and Smith (2016)

#### Homework 6: Estimating Product Quality and competition (due Apr 6)

#### Part 11: Student Presentations

Lectures 25-27 (Apr 11, 13, 18)

Final Exam: Lecture 28 (April 20)

### References

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