Applied Econometrics for International Economics
Course Syllabus

Instructor: Olga Popova, Ph.D. candidate, CERGE-EI, Prague
E-mail: Olga.Popova@cerge-ei.cz
Office hours: chair 212, Wed 17.00-18.30 or by appointment

Class time and classroom
Lectures: Fri, 19.30-21.00, room 317 (the room is subject to change);
    Thu, 19.30-21.00, room 425;
Seminars: Mon, 12.20-13.50, computer class

Language of Instruction: English

Prerequisites: Basic Econometrics, Applied Econometrics for Macroeconomics, International Economics

Course description: This course serves as the part in the Econometrics sequence and builds on the knowledge received in theoretical courses in International Economics. The aim of the course is to introduce the methodology used in applied empirical research within International Economics and review the current state of theory and empirical work. Lectures will be accompanied with practical exercise sessions to assure the understanding of theoretical concepts and provide guidance for using these concepts in applied research.

Grading: The grade for the course is based on midterm exam (35%), non-cumulative final exam (35%), and two homework assignments (30%). Final grades for the course are relative: a student’s grade is based on the comparison of his performance with the performance of other students.

Midterm and final are written closed book, closed notes exams. There will be no possibility to make up a midterm exam. Violation of academic honesty during exams (including the use of unauthorized materials, receiving and/or providing unauthorized help from/to other students) would result in a failing grade for the exam.

Homework assignments will contain empirical and theoretical parts. Students may work at home assignments alone or in a group of up to three people, but everyone has to hand in his own solution. Please write the names of the members of your group at the homework. The first homework is due to midterm exam, the second one is due to final exam. For the first homework late submissions are acceptable; however for each day of delay 10 points (of total 100 points for the homework) will be subtracted from your homework score. No late submissions are acceptable for the second homework.

Course outline (subject to change with prior notification):

- **Lecture 1. Using empirical methods in international economics: time series models**
  - Introduction to the course: review of topics to be covered.
  - Estimation of the ARMA models of time series. Box-Jenkins Methodology. Simple extensions of the ARMA model. *(Enders, ch.2.2, 2.4, 2.8, 7.2; Kocenda, ch. 1.6, 3.1).*

- **Lecture 2. Modeling exchange rate volatility:** ARCH, GARCH. Identification. Estimation. Extensions. BDS test. *(Enders, ch.3; Kocenda, ch. 3.7).*

- **Exercise session 1 (computer class)** based on Lectures 1-2. Introduction to TSP and Eviews. Estimation of ARMA models and applying Box-Jenkins methodology. Estimation of ARCH models. **First Homework assignment due to Midterm.**

- **Lecture 3. Use of forecasting methods in international economics.** Basic principles of forecasting. Types of forecasting. Models of forecasting. *(Enders, ch. 2.9; Hamilton, ch. 4; Ramanathan, ch. 11)*

• Lecture 5. International Parity Conditions. Types of parity conditions. Empirical tests and evidence. (Wang, ch.3; Chowdhry, Roll and Xia (2005); Dutton and Strauss (1997))


• Midterm Exam (covers the first part of the course)


• Lecture 9. The Heckscher-Ohlin-Vanek Model. Short theoretical description. Approaches to testing the model. (Feenstra, ch.2; Krugman, ch.4; Davis and Weinstein (2001), Trefler (1995)).


• Final exam (covers the second part of the course).

Readings: There is no principal textbook for the course. The course content is based on selected topics from textbooks and complemented by journal articles.

Supplementary Textbooks:


Recommended articles (subject to change with prior notification):

Forecasting


**International Parity Conditions**


**Pass-through**


**HOV model**


**BS Effect**


**Gravity Equation**


**Trade**

