

# ERSA Online Course on Empirical Industrial Organization (part I) February – March 2021

## **PURPOSE**

The purpose of this course is to introduce the methods of Empirical Industrial Organization. The course will cover key economic techniques to empirically analyze competition in markets. The course will combine lectures and hands-on sessions during which real industry data sets will be used to conduct econometric estimations in R (or STATA).

After the course you should be able to undertake basic quantitative analysis aimed at assessing functioning of the markets. You should also learn how to interpret and critically evaluate different empirical methods, as well as understand what the data requirements for applying various techniques are.

The course will consist of two parts. Part I will be an introduction into theoretical methods, programming in R and estimation of homogenous demand and supply systems covered in 5 online sessions. Part II will focus on applications such as collusion, mergers, effects of entry and others (also 5 online sessions).

# **LECTURERS**

Prof Lukasz Grzybowski, University of Cape Town: <a href="mailto:lukasz.grzybowski@uct.ac.za">lukasz.grzybowski@uct.ac.za</a>
Dr Ryan Hawthorne, Acacia Economics: <a href="mailto:ryan@acaciaeconomics.com">ryan@acaciaeconomics.com</a>
Melissa Newham, KU Leuven University: <a href="mailto:melissa.newham@gmail.com">melissa.newham@gmail.com</a>

## **HOW TO SUBSCRIBE?**

The course will take place on Zoom platform (an invite will be distributed to participants). The course is open to graduate students in economics, staff at South African universities, research institutes and other organizations involved in applied economic research. Researchers and graduate students from outside South Africa can also participate. Please note a stable internet connection is a prerequisite for attending this course.

To enroll in the course, please, send an email with brief background info and motivation to: <a href="mailto:lukasz.grzybowski@uct.ac.za">lukasz.grzybowski@uct.ac.za</a>

# Deadline for registrations is February 21, 2021

DATE AND TIME	TOPIC
Wednesday, 24 February 17.00 - 19.30 (Online)	Session 1: Oligopolistic Competition Refresher Lukasz Grzybowski  Introduction into course The Cournot Game - quantity competition Bertrand's Paradox - price competition Price competition with differentiated products  Reading Luis Cabral (2000) Introduction to Industrial Organization, Chapters 6 and 7
Wednesday, 3 March 17.00 - 19.30 (Online)	<ul> <li>Session 1: Introduction into R and Econometrics Ryan Hawthorne</li> <li>Refresher of econometrics: OLS, 2SLS and endogeneity</li> <li>Introduction into R, and commands OLS, 2SLS</li> <li>Practice exercise: estimation of linear regression and controlling for endogeneity</li> <li>Reading</li> <li>Davis and Garces (2010) Quantitative Techniques for Competition and Antitrust Analysis, Chapter 2</li> </ul>
Wednesday, 10 March 17.00 - 19.30 (Online)	Session 3: Estimation of Demand for Homogenous Goods Lukasz Grzybowski  Structure-Conduct-Performance and its demise New Empirical Industrial Organization (NEIO) Estimating the demand function for a homogenous good Simultaneity of demand and supply  Readings Davis and Garces (2010) Quantitative Techniques for Competition and Antitrust Analysis, Chapters 2 and 9.1.1
Wednesday, 17 March 17.00 - 19.30 (Online)	Session 4: Identification of Conduct and Collusion Lukasz Grzybowski  Identification of conduct parameter

	<ul> <li>Inferring collusion from market data</li> <li>Discussion of Genesove and Mullin (1998)</li> <li>Readings</li> <li>Davis and Garces (2010) Chapter 6 pages 300-338</li> <li>Genesove and Mullin (1998) "Testing Static Oligopoly Models: Conduct and Cost in the Sugar Industry, 1890-1914", Rand Journal of Economics.</li> </ul>
Wednesday, 24 March 17.00 - 19.30 (Online)	Session 5: Econometrics Tutorial Ryan Hawthorne  Practical R workshop on the estimation of railway cartel (read Porter, 1983)  Readings  • Davis and Garces (2010) Chapter 6 pages 300-338  • Porter (1983) A study of cartel stability: the Joint Executive Committee, 1880-1886. The Bell Journal of Economics