

# EMPIRICAL INDUSTRIAL ORGANIZATION – MODULE 3, SPRING 2020

Faculty of Economic Sciences

National Research University Higher School of Economics

## BASIC INFORMATION

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INSTRUCTOR'S NAME	Ekaterina Kazakova
CLASS TIMES AND LOCATIONS	Lectures: tba Seminars: tba
EMAIL	<a href="mailto:ekaterina.kazakova@hse.ru">ekaterina.kazakova@hse.ru</a>
OFFICE LOCATION	Room S-514
OFFICE HOURS	Friday 10:30 – 13:30, Room S-514

## GENERAL INFORMATION ABOUT THE COURSE

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This course is designed to introduce the students to the tools for the empirical analysis of industries and markets. In particular, we will cover traditional topics in empirical industrial organization (demand estimation, productivity estimation, and static entry/exit models). The course is associated to exercise sessions devoted to practical applications. We will replicate some of the empirical workhorse models using software like Stata and MATLAB.

## COURSE GOALS, LEARNING OBJECTIVES, EXPECTED LEARNING OUTCOMES

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You are expected to acquire broad knowledge on the key topics and techniques of empirical industrial organization. Accordingly, you are expected to be able to conduct your own independent industrial analysis using real-life data.

## COURSE OUTLINE

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Course consists of 15 lectures and 13 seminar sessions. In the lectures, we will cover basic IO models and discuss the related real-life business cases. In each seminar, a group of students prepare a 20-minutes presentation of the paper related to a given topic. Overall, 11 papers are going to be presented. The rest of the seminar is devoted to solving theory tasks to the topic discussed in the preceding week. The goal of the problem sets is to make sure you understand and are able to work with modified (and simplified) versions of the canonical models we discussed during lectures. Accordingly, it is strongly recommended to solve all problem sets before coming to the seminar.

### DESCRIPTION OF COURSE METHODOLOGY AND FORMS OF ASSESSMENT TO BE USED

50%	HOMEWORKS	The content of homework assignments will be application of learned estimation techniques in practice and replication of related papers. Assignments can be submitted in groups of two people (depending on the number of course participants). Homework assignments will be posted 3 weeks in advance to the corresponding submission deadline. More information on the deadlines and number of homeworks will be available in January 2020.
30%	TERM PROJECT	Term project evaluation consists of the short essay in a form of a research proposal. It should be submitted individually.
20%	FINAL EXAM	Final written exam will mainly consists of open questions related to the practical application of EIO for industry analysis.

## TENTATIVE SCHEDULE

### LECTURE 1: Introduction

Aguirregabiria, Victor, 2012. "Empirical Industrial Organization: Models, Methods, and Applications"

Akerberg, Daniel & Lanier Benkard, C. & Berry, Steven & Pakes, Ariel, 2007. "Econometric Tools for Analyzing Market Outcomes," Handbook of Econometrics

### LECTURE 2-3: Competition, collusion and cartel

Porter, Robert H., 1983. "A Study of Cartel Stability: The Joint Executive Committee, 1880-1886," Bell Journal of Economics, The RAND Corporation, vol. 14(2), pages 301-314

Bresnahan, Timothy F., 1987. "Competition and Collusion in the American Automobile Industry: The 1955 Price War," Journal of Industrial Economics, Wiley Blackwell, vol. 35(4), pages 457-482

Genesove, David & Mullin, Wallace P., 1998. "Testing Static Oligopoly Models: Conduct and Cost in the Sugar Industry, 1890-1914," RAND Journal of Economics, The RAND Corporation, vol. 29(2), pages 355-377

### LECTURE 4-5: Estimation of demand for differentiated goods

Berry, Steven T., 1994. "Estimating Discrete-Choice Models of Product Differentiation," RAND Journal of Economics, The RAND Corporation, vol. 25(2), pages 242-262

Berry, Steven & Levinsohn, James & Pakes, Ariel, 1995. "Automobile Prices in Market Equilibrium," Econometrica, Econometric Society, vol. 63(4), pages 841-890

### LECTURE 6-7: Estimation of production functions

Olley, G. Steven & Pakes, Ariel, 1996. "The Dynamics of Productivity in the Telecommunications Equipment Industry," Econometrica, Econometric Society, vol. 64(6), pages 1263-1297

Levinsohn, James & Petrin, Amil, 2003. "Estimating Production Functions Using Inputs to Control for Unobservables," Review of Economic Studies, Oxford University Press, vol. 70(2), pages 317-341

Akerberg, Daniel A. & Caves, Kevin & Frazer, Garth, 2015. "Identification Properties of Recent Production Function Estimators," Econometrica, Econometric Society, vol. 83, pages 2411-2451

### LECTURE 8-9: Estimation of static entry/exit games

Bresnahan, Timothy F & Reiss, Peter C., 1991. "Entry and Competition in Concentrated Markets," Journal of Political Economy, University of Chicago Press, vol. 99(5), pages 977-1009

Seim, Katja, 2006. "An empirical model of firm entry with endogenous product-type choices," RAND Journal of Economics, RAND Corporation, vol. 37(3), pages 619-640

### LECTURE 10: Extensions and applications or additional selected topic

\* Lectures will be based on the papers in the above list, which will be complemented by extensions and applications of those models.

## TEXTS, READINGS AND OTHER INFORMATIONAL RESOURCES

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Lecture slides are posted in the LMS website and [ekaterinakazakova.com](http://ekaterinakazakova.com) (in the teaching section). Lectures are self-sufficient and presented by a convex combination of material from the following books:

- Victor Aguirregabiria, "Empirical Industrial Organization: Models, Methods and Applications".
- Paul Belleflamme and Martin Peitz, "Industrial Organization: Markets and Strategies".

## EXAMINATION/EVALUATION

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To receive a passing grade, students should earn at least 30% of the maximum possible final grade.

There is a retake for the exam for students missing the first-take for a valid reason.

## ACADEMIC INTEGRITY

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The Higher School of Economics strictly adheres to the principle of academic integrity and honesty. Accordingly, in this course there will be a zero-tolerance policy toward academic dishonesty. This includes, but is not limited to, cheating, plagiarism (including failure to properly cite sources), fabricating citations or information, tampering with other students' work, and presenting a part of or the entirety of another person's work as your own. HSE uses an automated plagiarism-detection system to ensure the originality of students' work. Students who violate university rules on academic honesty will face disciplinary consequences, which, depending on the severity of the offense, may include having points deducted on a specific assignment, receiving a failing grade for the course, being expelled from the university, or other measures specified in HSE's [Internal Regulations](#).

## CHANGES TO THE SYLLABUS

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Any changes to this syllabus will be announced in class and [ekaterinakazakova.com](http://ekaterinakazakova.com).