# Microeconometrics: course description

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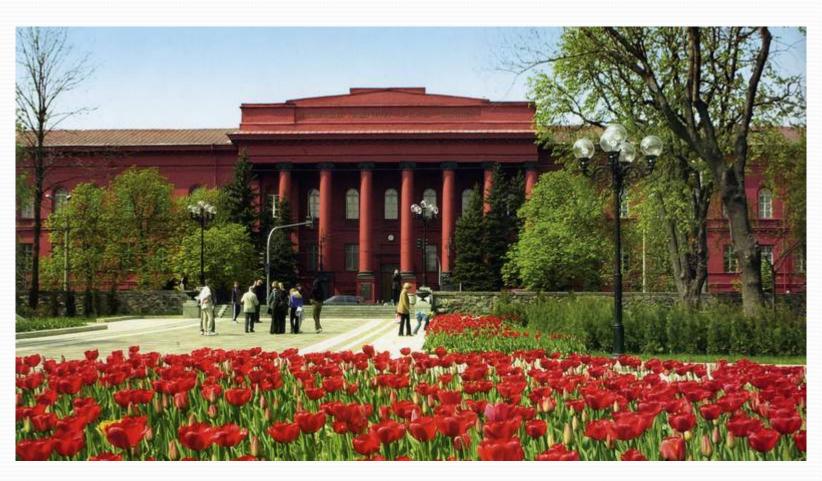








## National Taras Shevchenko University of Kyiv



#### Microeconometrics =

- Micro data +
- Econometric methods

#### Description

#### Principal goals are:

- to form the analytical skills in microeconometrics,
- to acquire necessary programming knowledge and skills in EViews
- to learn how to apply microeconometric modelling technics for the analysis of microeconomic, macroeconomic and managerial data.

The main skills that are trained under this program:

- empirical modelling of economic processes, using micro data,
- application of microeconometric techniques for micro data analysis,
- application of EViews software.

#### Learning outcomes

- The ability to read advanced level economic and econometric literature that deals with micro data analysis.
- The ability to design and to conduct appropriate econometric analysis of micro data.
- The ability to apply EViews software for any discussed micro data model.

#### Agenda – 1

- Introduction to Microeconometrics.
  - 1. Econometric review,
  - 2. Testing of hypothesis,
  - Choosing the best model,
  - 4. Software application for modelling.
- 2. Quantile Regression
  - Motivation of Quantile Regression,
  - 2. Quantile regression Estimation,
  - 3. Properties of the Estimator,
- 3. Binary-Valued Dependent Variables
  - Probit/Logit Models
  - 2. Estimating a Probit/Logit Model
  - 3. Deriving Probit/Logit

#### Agenda – 2

- 4. Multinomial models
  - 1. Multinomial logit
  - 2. Ordered, sequential, and ranked outcomes
  - 3. Multivariate discrete outcomes
- 5. Tobit and selection models
  - Censored and truncated models
  - 2. Tobit model
  - 3. Heckman Selection Model
- 6. Panel Data Analysis
  - Panel Data
  - 2. Panel Data DGP's
  - 3. Fixed Effects
  - 4. Random Effects
  - 5. The Hausman Test

#### Reading list

- Cameron, A. Colin, Trivedi, Pravin K. (2005) Microeconometrics: Methods and Applications. - Cambridge University Press
- Wooldridge, Jeffrey M. (2010) Econometric Analysis of Cross Section and Panel Data, 2<sup>nd</sup> ed. The MIT Press
- Baltagi, Badi H. (2013) Econometric Analysis of Panel Data, 5<sup>th</sup> ed. John Wiley & Sons, Inc.
- Biørn, Erik (2016) Econometrics of Panel Data: Methods and Applications. Oxford University Press
- Hsiao, Cheng (2014) Analysis of Panel Data, 3<sup>rd</sup> ed. Cambridge University Press
- Degryse, Hans, Kim, Moshe, Ongena, Steven (2009) Microeconometrics of Banking: Methods, Applications, and Results. - Oxford University Press
- Lee, Myoung-jae (2010) Micro-Econometrics. Methods of Moments and Limited Dependent Variables. Springer
- Joseph M. Hilbe (2017) Logistic Regression Models. Chapman and Hall/CRC
- Greene, William H. (2017) Econometric Analysis, 8th ed. Pearson
- Wiśniewski, Jerzy Witold (2015) Microeconometrics in Business Management. John Wiley & Sons, Inc.
- Adams, Abi, Clarke, Damian, Quinn, Simon (2016) Microeconometrics and MATLAB: An Introduction. - Oxford University Press

### **Teaching Methods**

Activity	Number	Hours
Lectures (2 hours each)	6	12
Seminars (2 hours each)	6	12
Individual project	1	Self-fulfilling at home
Exam (theoretical part)	1	1
Exam (practical part)	1	1

#### **Assessment Methods**

Description	Per cent of assessment
Seminar's activity, including fulfilling special	10%
home-tasks Individual project	30%
Written exam (theoretical part)	30%
Written exam (practical part)	30%

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### Questions?