

# Syllabus of the course

«Econometrics»

Specialty	073 Management
Study programme	Business Administration
Level of education	first (bachelor's)
Discipline status	Mandatory
Teaching language	English
Course / semester	2 <sup>nd</sup> course, 4 <sup>th</sup> semester
Number of credits ECTS	5
Distribution by types of trainings	Lectures – 18 hours.
and hours of study	Practical studies (seminars) – 14. hours.
	Laboratory studies – 16 hours.
	Independent training – 102 hours.
Form of final assessment	Exam
Department	Economic Cybernetics and System Analysis Department, room
	419 (main building), (057)702-06-74 (3-56),
	https://ek.hneu.edu.ua/
Teacher (-s)	Prokopovych Svitlana V., Associate Professor of the Economic
	Cybernetics and System Analysis Department, Candidate of
	Economic Sciences, Associate Professor
Teacher's contacts	prokopovichsv@gmail.com
	https://ek.hneu.edu.ua/vykladachi/prokopovych-svitlana-
	<u>valeriyivna/</u>
Days of the classes	Lectures: according to the current schedule of classes
	Practical studies: according to the current schedule of classes
	Laboratory studies: according to the current schedule of
	<u>classes</u>
Consultations	https://ek.hneu.edu.ua/

**The purpose** of the discipline is formation of a system of theoretical knowledge and mastering the ability to build econometric models that quantify the relationship between economic and financial variables, and study the conditions and possibilities of applying econometric methods to solve practical problems in real conditions.

## **Prerequisites for learning**

Political Economy, Microeconomics, Macroeconomics, Higher Mathematics, Probability Theory and Mathematical Statistics

#### **Content of the course**

Content module 1. Methods of econometric modeling

**Topic 1. Econometrics and Econometric Modeling** 

Topic 2. Simple Linear Regression

**Topic 3. Multiple Linear Regression** 

**Topic 4. The Problem of Multicollinearity in Regression** 

**Content module 2.** Applied econometrics

**Topic 5. Autocorrelation** 

**Topic 6. Heteroskedasticity** 

**Topic 7. Nonlinear Regression. Production Functions** 

**Topic 8. Dynamic Econometric Models** 

**Topic 9. Econometric Models Based on a System of Structural Equations** 

**Topic 10. Multidimensional Classification Methods** 



# Material and technical support (software) of the course

MS Excel, Multidimensional Classification Methods

Course page on the Moodle platform <u>https://pns.hneu.edu.ua/course/view.php?id=6827</u> (personal training system)

# Assessment system of learning outcomes

The system of assessment of the formed competencies takes into account the types of classes, which include lectures, laboratory classes, as well as independent work. Assessment of the formed competencies of students is carried out according to the accumulative 100-point system. Current control, which is carried out during the semester during laboratory classes and independent work is assessed by the sum of points scored. The maximum possible number of points for the current and final control during the semester -100 and the minimum possible number of points -60.

Current control includes the following control measures: tasks by topics; current control works. More detailed information is in the Working plan.

## Distribution of points according to the types of study

Maximal points
4,25
1,75
2
24
16
12
40
100

# **Course policies**

The teaching of the discipline is based on the principles of academic integrity. Violations of academic integrity include: academic plagiarism, fabrication, falsification, write-off, deception, bribery, and biased evaluation. For violation of academic integrity, students are brought to the following academic responsibility: re-assessment of the relevant type of educational work

More detailed information about competencies, learning outcomes, teaching methods, assessment forms, independent training is given in the Program of the course.

Syllabus approved at the meeting of the Department. Protocol №21 from 25.06.2021