Syllabus of the educational discipline

«Econometrics»

Specialty	*073 Management*
Study Programme	*Logistics*
Study cycle (Bachelor, Master, PhD)	*the first (Bachelor) level of higher education*
Course status	*mandatory*
Language	*English*
Term	*second year, fourth semester*
ECTS credits	*5*
Workload	*Lectures – 18 hours.*
	Practical studies– 14 hours.
	Laboratory studies – 16 hours.
	Self-study – 102 hours.
Assessment system	*Grading*
Department	*Economic Cybernetics and System Analysis Department, room 419 (main building), (057)702-06-74 (3-56), https://ek.hneu.edu.ua/*
Teaching staff	*Prokopovych Svitlana V., Associate Professor of the Economic Cybernetics and System Analysis Department, Candidate of Economic Sciences, Associate Professor*
Contacts	*prokopovichsv@gmail.com* *https://ek.hneu.edu.ua/vykladachi/prokopovych-svitlana-valeriyivna/*
Course schedule	*Lectures: according to the schedule* *Practical studies: according to the schedule* *Laboratory studies: according to the schedule*
Consultations	*At the Economic Cybernetics and System Analysis Department, offline, according to the schedule, individual, PNS chat.*

Learning objectives and skills:

is to form a system of theoretical knowledge and acquire the skill of constructing econometric models that quantitatively describe the relationships between economic variables. It also involves studying the conditions and possibilities of applying econometric methods to solve economic problems in real conditions.

Structural and logical scheme of the course

Prerequisites	Post-requisites
Higher Mathematics	Functional Logistics
Economy of the enterprise	Economic Analysis of Enterprise Activity
Probability Theory and Mathematical Statistics	

Content of the educational discipline

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. Multicollinearity and its Impact on Model Parameter Estimates

Topic 5. Building a Model with Autocorrelated Residuals

Content module 2. *Applied econometrics*

Topic 6. Heteroskedasticity in Econometric Models
Topic 7. Nonlinear Regression. Production Functions
Topic 8. Topic 6. Heteroskedasticity in Econometric Models
Topic 9. Econometric Models Based on a System of Structural Equations

Teaching environment (software)

Multimedia projector, S. Kuznets PNS, Corporate Zoom system, software: MS Excel, Statistica, R

Assessment system

The final control includes current control and assessment of the student.
Semester control is carried out in the form of grading.
The final grade in the course is the amount of all points received during the current control.
During the teaching of the course, the following control measures are used:
1) Completion of individual assignments (maximum score – 50 points).
2) Completion of intermediate test assessments (maximum score – 30 points).
3) Completion of modular control works (maximum score – 20 points).
Semester control: Grading
More detailed information on assessment and grading system is given in the technological card of the course.

Course policies

Teaching of the academic discipline is based on the principles of academic integrity.
Violation of academic integrity includes academic plagiarism, fabrication, falsification, cheating, deception, bribery, and biased assessment.
Education seekers may be brought to the following academic responsibility for breach of academic integrity: repeated assessment of the corresponding type of learning activity.

More detailed information about competencies, learning outcomes, teaching methods, assessment forms, self-study is given in the Course program