

APPLIED ECONOMETRICS IN LOGISTICS

COURSE SYLLABUS ABSTRACT of higher education institution

Speciality 6-05-1042-01 «Transport logistics»
Profilization «Regional transport and logistics systems»

	STUDY MODE	
	Full-time	Part-time (shortened program)
Year	3	3
Semester	5	5
Lectures, hours	16	4
Practical classes, hours	16	2
Laboratory classes, hours	16	4
In-class test, semester (hours)	5	5
Exam, semester	–	5 (2 hours)
Contact hours	48	12
Independent study, hours	50	96
Total course duration in hours / credit units	108 / 3	

1. Course outline

The objectives of the academic discipline are to develop students' analytical and algorithmic thinking skills for the successful application of econometric analysis in practical activities.

2. Course learning outcomes

Upon completion of the course, students will be expected

to know:

- concept of generalized linear multiple regression model;
- generalized least squares method;
- basic models and methods of time series analysis;
- methods of modeling stationary time series;
- methods of modeling non-stationary time series;
- basic problems of econometric modeling of economic objects, processes and phenomena;

be able to:

- build and analyze a generalized multiple regression model;
- determine the components of a time series;
- check for a trend in a time series;
- find a trend;
- model seasonal and cyclical fluctuations;
- perform smoothing and analytical alignment of time series;
- model stationary and non-stationary time series;
- use application software packages to solve econometric problems (MS Excel, Statistica, SPSS, Eviews).

to possess a skill:

- specification, identification and verification of economic models;
- mastery of the mathematical apparatus for solving problems of econometric modeling of economic processes, objects and phenomena.

3. Competencies

- Master the basics of research activities, search, analyze and synthesize information.
- Solve standard tasks of professional activity based on the use of information and communication technologies.
- Use modern software packages on econometrics and applied statistics for empirical analysis of socio-economic processes and systems when making management decisions in logistics.

4. Requirements and forms of midcourse evaluation and summative assessment

A modular rating system is used. The forms of current certification are tests, defense of individual assignments. The form of intermediate certification is an exam.