

QUANTITATIVE METHODS OF ANALYSIS IN BUSINESS

COURSE SYLLABUS ABSTRACT

7-06-0311-01-1 «Economy»

(speciality code and name)

Economic development of industrial and transport organizations

(profiling)

Advanced higher education

	STUDY MODE	
	full-time	part-time
Year	1	1
Semester	1	2
Lectures, hours	36	10
Practical classes, hours	18	6
Laboratory classes, hours	18	4
Exam, semester	1	2
Contact hours	72	20
Independent study, hours	144	196
Total course duration in hours / credit units	216 / 6	

1. Course outline

Methods for quantitative data analysis: graphs and tables. Methods of quantitative data analysis: summarizing indicators. Probability and probability distributions. Normal, binomial and Poisson distributions. Multi-step decision-making procedures under conditions of uncertainty. Samples and distributions of samples. Estimation of confidence intervals. Hypothesis testing.

2. Course learning outcomes

Upon completion of the course, the student will be expected

to know:

- the analytical needs of the organization at the strategic and tactical levels;
- the methods of preliminary data analysis, the methods of data analysis necessary to solve the analytical problems of the organization;

be able to:

- formalize the analytical task of the organization, formulated in the language of the applied field, presenting it in the form of mathematical relationships (models) and statistical hypotheses, select methods for identifying the constructed models and criteria for testing the formulated hypotheses;

to possess skills:

- of independently building a business intelligence system in an organization, i.e. defining a system of analytical tasks as a set of interrelated and interacting elements necessary to support decision-making in the implementation of business development projects.

3. Competencies

SC-2 Form, process and analyze databases to solve practical business problems under conditions of uncertainty.

UC-2 Apply the methods of scientific knowledge in research activities, generate and implement innovative ideas.

4. Requirements and forms of midcourse evaluation and summative assessment

Midcourse evaluation is carried out in the form of midcourse progress control (MPC), which is performed in the form of defending individual tasks in practical classes and defending laboratory works. The form of the midcourse evaluation (ME) is an exam.