# МІНІСТЕРСТВО ОСВІТИ І НАУКИ УКРАЇНИ

# ХАРКІВСЬКИЙ НАЦІОНАЛЬНИЙ ЕКОНОМІЧНИЙ УНІВЕРСИТЕТ ІМЕНІ СЕМЕНА КУЗНЕЦЯ



# АНАЛІТИЧНЕ ЗАБЕЗПЕЧЕННЯ УПРАВЛІННЯ БІЗНЕСОМ

робоча програма навчальної дисципліни

Галузь знань Спеціальність Освітній рівень Освітня програма 07 "Управління та адміністрування" 073 "Менеджмент" перший (бакалаврський) "Бізнес-адміністрування"

Статус дисципліни Мова викладання, навчання та оцінювання обов'язкова англійська

Завідувач кафедри менеджменту та бізнесу

Тетяна ЛЕПЕЙКО

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# MINISTRY OF EDUCATION AND SCIENCE OF UKRAINE

# SIMON KUZNETS KHARKIV NATIONAL UNIVERSITY OF ECONOMICS



# ANALYTICAL SUPPORT FOR BUSINESS MANAGEMENT

# syllabus of the academic discipline

Field of knowledge Speciality Education level Educational programs 07 "Management and administration" 073 "Management" first (bachelor) "Business Administration"

Discipline status Language of teaching, studying and assessment Compulsory English

Head of Management and Business department

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# APPROVED at the meeting of the Management and Business Department. Protocol № 1 of August 29, 2022.

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# Sheet of renewal and re-approval syllabus of the academic discipline

Academic year	Date of the department meeting - developer of the syllabus	Protocol number	Sign of the Head of the department

## Abstract of the educational discipline

The program of studying the discipline "Analytical support for business management" is compiled according to the educational program of bachelors preparation.

"Analytical support for business management" is a compulsory discipline of the educational program "Business Administration" of the first (bachelor's) level of higher education, specialty 073 "Management".

The discipline "Analytical support for business management" considers the theoretical foundations and practical methods of business management based on economic analysis.

The purpose of the discipline "Analytical support for business management" is the formation of students' competencies in the use of economic analysis methods for efficient business management.

Tasks of the discipline are: to consider the foundations of the modern managerial science; to analyse the approaches to management that were evolved; to study features and content of the planning as a function of management; to study organization as a social-economic system and as a managerial function; to consider different approaches to the staff motivation; to consider the control process in business organizations.

The subject of the discipline "Management" is theoretical basis and functions of management.

## **Characteristics of educational discipline**

Course	3
Semester	5
Number of credits ECTS	5
Form of final control	Exam

Prerequisites	Postrequisites
Macro- and microeconomics	Business performance evaluation
Finance	Technologies of the decision making in business
Management	Strategic management
Informatics	

#### Structural and logical scheme of studying the discipline:

## Competences and learning outcomes in the discipline

Competences	Learning outcomes	
1	2	
GC 3. Ability to abstract thinking, analysis, synthesis.	LO 3. Demonstrate knowledge of theories, methods and functions of management, modern concepts of leadership. LO 11. Demonstrate skills in situation analysis and communication in various areas of the organization.	
GC 4. Ability to apply knowledge in practical situations.	LO 18. Assess opportunities for using technology to optimize business performance. LO 20. Coordinate aspects of business organizations that contribute to the effectiveness of its work.	
I	Continuation of the table	

1	2
GC 5. Knowledge and understanding of the subject area and understanding of professional activity.	LO 12. Assess the legal, social and economic consequences of the organization's functioning. LO 21. Demonstrate communication, research, technological and cross-cultural skills necessary to analyze business situations, prepare, justify and present management decisions.
GC 8 Skills in using information and communication technologies.	LO 12. Assess the legal, social and economic consequences of the organization's functioning.
SC 1. Ability to define and describe characteristics of the organization. SC 2. Ability to analyze the results of the organization's activities, to compare them with the factors of influence of the external and internal environment.	LO 7. Demonstrate organizational design skills.
SC 2. Ability to analyze the results of the organization's activities, to compare them with the factors of influence of the external and internal environment.	<ul> <li>LO 6. Demonstrate the skills of searching, collecting and analyzing information, calculating indicators to substantiate management decisions.</li> <li>LO 8. Apply management methods to ensure the effectiveness of the organization</li> <li>LO 12. Assess the legal, social and economic consequences of the organization's functioning.</li> <li>LO 18. Assess opportunities for using technology to optimize business performance.</li> </ul>
SC 10. Ability to evaluate the work performed, ensure its quality and motivate the organization's personnel.	LO 4. Demonstrate skills in problem identification and management decisions justification. LO 6. Demonstrate the skills of searching, collecting and analyzing information, calculating indicators to substantiate management decisions.
SC 11. Ability to create and organize effective communications in the management process.	LO 5. Describe the content of the functional areas of the organization
SC 12. Ability to analyze and structure the problems of the organization, to form reasonable solutions	LO 6. Demonstrate the skills of searching, collecting and analyzing information, calculating indicators to substantiate management decisions.
SC 13 Understand the principles of law and use them in professional activities.	LO 12. Assess the legal, social and economic consequences of the organization's functioning.

## The program of the educational discipline

#### Content module 1. Theoretical and methodological foundations of analysis in business

## Topic 1. Scientific basis of analysis and its role in business management

Economic analysis as a branch of management science. The essence, subject and object of economic analysis. The role and tasks of economic analysis. Principles of economic analysis. The connection of economic analysis with other sciences and disciplines. Technological stages of economic analysis.

Classification of economic analysis. Classification of analysis according to branch, temporal, spatial characteristics, aspects of research, users of analysis, research methodology, subjects of analysis, degree of coverage of objects, content of the program.

Main categories of economic analysis. Production resources, factors, classification of economic analysis factors, reserves, classification of reserves in economic analysis.

Information provision of economic analysis. Organizational forms and performers of economic analysis at enterprises. Planning analytical work. Informational and methodological support of the analysis. Procedure for processing the results of the analysis.

## **Topic 2. Technologies of economic analysis**

Method and techniques of economic analysis. Method of economic analysis. Classification of techniques of economic analysis. Qualitative (abstract-logical) and quantitative methods of economic analysis. Descriptive and analytical methods of economic analysis. Basic techniques

Types of deterministic factor models. The task of deterministic factor analysis. Additive, multiplicative, multiple and mixed deterministic factor models.

Basic methods of deterministic factor analysis.

The essence, purpose and areas of application of the methods of chain substitution, absolute differences, relative differences, proportional division, the integral method and the logarithm method.

Correlation-regression analysis. Pair correlation. Multiple correlation. Values and stages of correlation analysis. Methodology for calculating the main indicators of connections. Scope and order of application of correlation analysis results.

Analysis of variance. Problems of dispersion analysis. Univariate variance analysis. Two-factor variance analysis.

## **Content module 2. Methodology of comprehensive business analysis**

#### **Topic 3. Analysis of production and sale of products**

Tasks and information provision of analysis of production and sale of products. General scheme and sequence of analysis. The system of indicators of production and volumes of production. Factors affecting the production of products. Analysis information base.

Analysis of the execution of the plan and the dynamics of production and sale of products. Methodology of analysis of production and sale of products. Factors of changes in its volume. Analysis of the performance of contractual obligations for the supply of products.

Analysis of product range and structure. The importance of the assortment policy of the enterprise. Factors of changes in product assortment and structure. Methodology for calculating the influence of the structure of production and sales of products on the performance of the enterprise.

Analysis of the quality of manufactured products. Summarizing, individual and indirect indicators of product quality. The task of analysis. Methods of generalized evaluation of the implementation of the plan for product quality: point method, average grading coefficient, weighted average prices in comparative conditions. Methodology for calculating the effect of product quality on the cost indicators of the enterprise. Reasons for the decrease in product quality.

#### **Topic 4. Analysis of cost, profit and profitability**

Meaning, tasks and objects of product cost analysis. The task of analysis. Sources. Objects of product cost analysis. Classification of costs. Fixed and variable costs. Direct and indirect costs.

Analysis of costs by economic elements and costing articles. Cost elements. Articles of expenditure. Analysis of the composition and structure of costs. Factors of change in the total amount of operating costs. Methods of calculation and evaluation of their influence.

Analysis of the financial results of the enterprise.

The task of analyzing financial results. Analysis of the structure and dynamics of profit. Factors of change in the level of profit and profitability, the procedure for calculating their influence.

#### **Topic 5. Analysis of the use of labor resources**

The task of analyzing the use of labor resources and labor costs. The value and task of the analysis. General scheme of analysis. Sources.

Analysis of the company's personnel supply. Determining the company's personnel supply by quantitative and qualitative parameters. Evaluation of the qualification level of the company's personnel and changes in its composition by age, work experience, and education. Study of the dynamics of indicators and reasons for personnel turnover.

Analysis of the use of labor resources. Analysis of the use of working time. Analysis of the effectiveness of the use of personnel. Labor productivity analysis. Analysis of labor intensity of production.

Analysis of the use of the wage fund. Determination of absolute and relative deviation in the wage fund. Analysis of the level of remuneration of the company's personnel taking into account inflation. Study of the relationship between the rate of growth of labor productivity and the level of its payment.

#### Topic 6. Analysis of the use of fixed assets

Analysis of the provision of the enterprise with the main means of production. Analysis of the dynamics and structure of fixed assets. Study of their movement and technical condition. Determining the enterprise's security of basic assets.

Analysis of the intensity and efficiency of the use of fixed assets. Indicators of efficiency and intensity of use of fixed assets. Factors of change in profitability and capital return of fixed assets. Methodology for determining their impact on the level of fund return, fund profitability and output.

Reserves for increasing output, return on capital and profitability of fixed assets. The main sources of reserves are an increase in output and an increase in the level of capital return. The method of their calculation.

The list of laboratory classes, as well as questions and tasks for independent work for topics is given in the table "Rating-plan of the educational discipline".

#### **Teaching and instruction methods**

The main method of teaching the discipline is an explanatory-illustrative method, which is a tool for studying theoretical material, all lectures are presented in the form of presentations using Microsoft PowerPoint. In the process of teaching the academic discipline "Analytical support for business managemen" for the implementation of the defined competencies of the educational program and the activation of the educational process in lecture/laboratory works the teaching methods are used: mini-lectures (Topic 1, 2), group work (Topic 3, 5), case technologies (Topic 4), situational tasks (Topic 3 - 6).

During lectures and laboratory classes, the following teaching methods are used: explanatory and illustrative, reproductive, problem-based teaching, partially research-based, research teaching methods.

### Assessment system of learning outcomes

Simon Kuznets KhNUE is using a 100-point accumulation system.

Assessment is carried out on the following types of control:

current control – is carried out during the semester during the lectures, practical classes and estimated by the amount of points scored (maximum score – 60 points, minimum score that allows the student to get credit – 35 points);

final/semester control – is conducted in the form of an exam in accordance with the schedule of the educational process (maximum score – 40 points, minimum score that allows the student to pass exam – 25 points).

Current control includes assessment of students' knowledge during laboratory classes and performance of competency-oriented tasks, written tests. It is carried out according to the criteria:

**competence-oriented task on the topic** – the ability to combine theory with practice when considering situations; logic, structure, the ability to make conclusion (maximum score – 10 points (three competence-oriented tasks during the semester, total maximum number of points – 30);

written test – degree of assimilation of actual material; logic, structure, sequence of task solution; the presence of their own conclusions. Ability to substantiate it; quality and clarity of reasoning (maximum score that a student can receive – 15 points (two written tests during the semester, the total maximum number of points – 30).

The general criteria for assessment non-auditing **independent work** of students are: the depth and strength of knowledge, the level of thinking, the ability to systematize knowledge on individual topics, the ability to make conclusions, skills and techniques for performing practical tasks, the ability to find necessary information, to carry out its systematization and processing. The results of the independent work are checked and evaluated during the classroom current control – oral interviews, presentation reports and written works.

The final score for the current control is defined as the sum of points for the results of student success in all tasks. The maximal score is 60 points; the minimal score for getting permission for an exam is 35 points.

**Final / semester control** of students' knowledge and competencies in the discipline is carried out in the form of an exam, the task of which is to check the student's understanding of the program material as a whole, logic and relationships between individual sections, ability to creatively use accumulated knowledge, problems of academic discipline, etc.

The exam consists of: one stereotypical task, one diagnostic task, one heuristic task. The assessment of students' knowledge during exam is carried out according to the following criteria:

**stereotypical task** (maximum score is 10 points). A score of 10 points is given for a complete and detailed solution to a practical situation. At the same time, correct conclusions should be made regarding the task and own conclusions should be formulated to describe the results of analysis. The design of the completed task should be neat. A score of 5 points is given for 50% of the practical task; provided that the student demonstrated the ability to diagnose a managerial problem when answering, but was unable to propose possible methods for solution;

**diagnostic task** (maximum score is 15 points). A score of 14 points is given for a complete and detailed solution to a practical situation. At the same time, correct conclusions should be made regarding the proposed managerial situation and own recommendations should be formulated to improve ways of overcoming the problem, that is, not only the specific situation should be diagnosed, but also its possible consequences and specific solutions should be proposed to overcome them. The design of the completed task should be neat. A score of 7 points is given for 50% of the practical task; provided that the student demonstrated the ability to diagnose a managerial problem when answering, but was unable to determine its possible consequences and propose possible ways to analyze and overcome it;

heuristic task (maximum score is 16 points). A score of 16-13 points is given for the proposed solution to the proposed managerial situation and the corresponding conclusions. At the same time, the decision should be developed and fully commented using graphs or other visual results of situation analysis. The design of the answer should be neat, logical and consistent. An assessment of 12-9 points is given on the condition that all the requirements for the assessment of "16 points" are fulfilled, but in the presence of minor errors (that is, the methodical approach to solving the problem is correct, but inaccuracies were made in the calculations of certain indicators, construction of graphs) or not quite complete conclusions based on the results of solving the task. The design of the completed task should be neat. A grade of 8-5 points is given if 70% of the task is completed, but the student was completely unable to analyze the situation, or there are significant errors in the analysis of the obtained results and no proposed ways to overcome the existing managerial problem at the enterprise. A grade of 4-3 points is given to a student who cannot complete the entire task completely correctly or does not give any comments on the progress of the task. However, at the same time, 50% of the calculations are carried out correctly, and relevant theoretical knowledge is available regarding the essence of the proposed problem. A grade of 2-1 points is given to a student who took the initial steps to solve a problem, but could not cope and made significant theoretical and practical errors at the beginning of the analysis.

The final score for the exam is defined as the sum of points for the results of student success in the all tasks. The maximal score for the exam is 40 points, the minimal score for pass exam successfully is 25 points.

During the semester control, the final number of points in the discipline (maximum -100 points) is defined as a sum of points for results of student success in the current control and exam.

A student **should be considered certified** if the sum of the points obtained on the basis of the results of the final / semester test of success is equal to or exceeds 60.

The total score in points for the semester is: *«60 or more points are passed»*, *«59 and less points are failed»*, and entered in the *«*Statement of learning achievement» of the academic discipline.

Forms of assessment and distribution of points are given in the table «Rating-plan of the educational discipline».

Торіс	Forms and types of learning	Forms of evaluation	Max points		
1	2	3	4		
Cont	Content module 1. Theoretical and methodological foundations of analysis in business				
	Classroom work				
Topic 1	Lecture 1 for questions: 1) economic analysis as a branch of management science; 2) classification of economic analysis; 3) main categories of economic analysis; 4) information provision of economic analysis.	Work on lecture			
	Laboratory work 1: Information sources for analysis.	Solving competence- oriented tasks			
	Individual work				
	Search, selection and review of literary sources on a given topic Completing the laboratory task				

# Rating-plan of the educational discipline

Continuation of the table

1		Continuation of th		
1	2	3	4	
Topic 2	Classroom work         Lecture 2 for questions:         1) method and techniques of economic analysis;         2) types of deterministic factor models;         3) correlation-regression analysis;         4) analysis of variance	Work on lecture		
	<ul><li>4) analysis of variance.</li><li>Laboratory work 2: Applying different methods and techniques of economic analysis.</li></ul>	Solving competence- oriented tasks	10	
	Individual work			
	Search, selection and review of literary sources on a given topic, Completing the laboratory task			
	Content module 2. Methodology of comprehensive busine	ess analysis		
	Classroom work			
Topic 3	<ul> <li>Lecture 3-4 for questions:</li> <li>1) tasks and information provision of analysis of production and sale of products;</li> <li>2) analysis of the execution of the plan and the dynamics of production and sale of products;</li> <li>3) analysis of product range and structure;</li> <li>4) analysis of the quality of manufactured products.</li> </ul>			
	Laboratory work 3. Analysis of the execution of the plan. Laboratory work 4: Analysis of product range and structure. Laboratory work 5: Analysis of the products quality.	Solving competence- oriented tasks Current control work	15	
	Individual work			
	Search, selection and review of literary sources on a given topic, completing the laboratory task, preparation for control work			
	Classroom work			
Topic 4	Lecture 5-6 for questions: 1) meaning, tasks and objects of product cost analysis; 2) analysis of costs by economic elements and costing articles; 3) analysis of the financial results of the enterprise.	Work on lecture		
	Laboratory work 6: Analysis of the composition and structure of costs. Laboratory work 7: Factors of change in the total amount of operating costs. Methods of calculation and evaluation of their influence. Laboratory work 8: Analysis of the financial results of the enterprise.	Solving competence- oriented tasks	10	
	Individual work			
	Search, selection and review of literary sources on a given topic, completing the laboratory task			

Continuation of the table

1	2	3	4	
Topic 5	Lecture 7-8 for questions: 1) the task of analyzing the use of labor resources and labor costs; 2) analysis of the company's personnel supply; 3) analysis of the use of labor resources.	Work on lecture		
	Laboratory work 9. Analysis of the company's personnel supply Laboratory work 10: Analysis of the use of working time. Laboratory work 11: Analysis of the effectiveness of the use of personnel.	Solving oriented	10	
	Individual work			
	Search, selection and review of literary sources on a given topic, completing the laboratory task			
	Classroom work			
Topic 6	Lecture 9-10 for questions: 1) analysis of the provision of the enterprise with the main means of production; 2) analysis of the intensity and efficiency of the use of fixed assets; 3) the main sources of reserves for increasing output, return on capital and profitability of fixed assets.	Work on lecture		
	Laboratory work 12: Analysis of the dynamics and structure of fixed assets. Laboratory work 13: Analysis of the efficiency and intensity indicators of fixed assets use. Laboratory work 14: Reserves for increasing output, return on capital and profitability of fixed assets.	Solving competence- oriented tasks		
	Individual work			
	Search, selection and review of literary sources on a given topic Completing the laboratory task, preparation for control work		15	
	Exam		40	

# **Recommended literature**

## Main

1. Mcafee R. P. Introduction to Economic Analysis / R. P. Mcafee, T.R. Lewis, D. J. Dale. – [Electronic resource] – Access mode: https://www.kellogg.northwestern.edu/faculty/dale/ieav21.pdf.

2. Laursen G. H. N. Business Analytics for Managers / G.H.N. Laursen, J. Thorlund. – 2020. [Electronic resource] – Access mode: https://www.booksfree.org/wp-content/uploads /2022/06/Business-analytics-for-managers-2nd-Edition-by-Gert-and-Jesper-pdf-free-download-booksfree.org.pdf.

## Additional

3. Guidelines for Business Case Analysis / R. Christoph, A. Seisreiner. [Electronic resource] – Access mode: https://www.uni-potsdam.de/fileadmin/projects/professional-services/downloads /skripte-ss/Anleitung\_Case\_Studies.pdf.

4. Business management and organization. [Electronic resource] – Access mode: https://ec.europa.eu/programmes/erasmus-plus/project-result-content/9a1c8bee-11f3-48f0-8e25-c86b14cf445a/Business%20Management%20And%20Organization%20Booklet.pdf.

5. Sreeramana A. Industry Analysis – The First Step in Business Management Scholarly Research / A. Sreeramana. [Electronic resource] – Access mode: https://www.academia.edu/ 33718341/Industry\_Analysis\_The\_First\_Step\_in\_Business\_Management\_Scholarly\_Research.

#### **Information resources**

6. Analytical support for business management: course page on the PNS of S. Kuznets KhNUE (Moodle platform) – Access mode: https://pns.hneu.edu.ua/course/view.php?id=9102.