# МІНІСТЕРСТВО ОСВІТИ І НАУКИ УКРАЇНИ ХАРКІВСЬКИЙ НАЦІОНАЛЬНИЙ ЕКОНОМІЧНИЙ УНІВЕРСИТЕТ ІМЕНІ СЕМЕНА КУЗНЕЦЯ

## **ЗАТВЕРДЖЕНО**

на засіданні кафедри Менеджменту та бізнесу Протокол  $N_{2}$  1 від 25.08.2023 р.



#### АНАЛІТИЧНЕ ЗАБЕЗПЕЧЕННЯ УПРАВЛІННЯ БІЗНЕСОМ

робоча програма навчальної дисципліни (РПНД)

Галузь знань 07 Управління та адміністрування

Спеціальність 073 Менеджмент

Освітній рівень перший (бакалаврський) Освітня програма Бізнес-адміністрування

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

Розробник:

к.е.н., доцент

Завідувач кафедри менеджменту та бізнесу

Гарант програми

Андрій КОТЛИК

Тетяна ЛЕПЕЙКО

Ольга МИРОНОВА

## MINISTRY OF EDUCATION AND SCIENCE OF UKRAINE SIMON KUZNETS KHARKIV NATIONAL UNIVERSITY OF ECONOMICS

#### APPROVED

at the meeting of the department management and business
Protocol № 1 of 25.08.2023



# Analytical support of business management Program of the course

Field of knowledge 07 "Management and administration"

Specialty 073 "Management"
Study cycle first (bachelor)

Study programme "Business Administration"

Course status mandatory
Language English

Developers:

PhD (Economics), Associate Professor

rissociate rioressor

Head of Management and Business Department

Head of Study Programme

Andrii KOTLYK

Tetyana LEPEYKO

Olga MYRONOVA

#### INTRODUCTION

Effective functioning of modern enterprises is impossible without the adoption of verified, balanced management decisions, which are based on a deep understanding of market trends, key characteristics of the enterprise's external environment, available and accessible resources, production, innovation, marketing and sales, financial capabilities, etc. This requires analytical support that will allow finding, selecting, analyzing the necessary information, identifying existing problems and opportunities for development, determining the causes of problems and developing recommendations for their elimination.

With the help of analytical support, business management studies development trends, deeply and systematically researches the factors of change in activity results, substantiates plans and management decisions, monitors their implementation, identifies reserves for improving business efficiency, evaluates the performance of the enterprise and its sensitivity to managerial influences, develops an economic strategy of its development. Therefore, analytical support constitutes the scientific basis for making managerial decisions in business, and therefore the duty of a qualified manager is to be well versed in modern methods of economic research and professionally perform a complex analysis of the enterprise's activities.

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

The goal of the course "Analytical support of business management" is to form a system of theoretical knowledge and practical skills in the field of enterprise analysis, identification of directions and reserves of its development, and justification of rational management decisions.

The tasks of the course include:

definition of the subject of the course, disclosure of the content of the categorical apparatus of analytical support for business management, its tasks at the enterprise;

mastering the principles and methods of economic analysis;

mastering the skills of analyzing business performance based on data from real enterprises.

The object of the course is the operational, financial and economic activity of the enterprise. The subject of the course is a set of principles and techniques for analyzing the activities of Ukrainian and international companies.

The learning outcomes and competencies formed by the course are defined in table 1.

Learning outcomes and competencies formed by the course

Table 1

Learning outcomes	Competencies
LO3	GC3
LO4	SC10
LO5	SC11

	SC2
LO6	SC10
	SC12
LO7	SC1
LO7	SC2
LO8	SC2
LO11	GC3
	GC5
LO12	GC8
LO12	SC2
	SC13
LO18	GC4
	SC2
LO20	GC4
	GC5
LO21	GC5

- where LO3. Demonstrate knowledge of theories, methods and functions of management, modern concepts of leadership.
  - LO4. Demonstrate skills in identifying problems and justifying management decisions.
  - LO5. Describe the content of the functional areas of an organization's activities.
- LO6. Demonstrate skills in searching, collecting and analyzing information, calculating indicators to justify management decisions.
  - LO7. Demonstrate organizational design skills.
  - LO8. Implement management techniques to ensure the effectiveness of the organization.
- LO11. Demonstrate skills in situation analysis and communication in various areas of the organization's activities.
  - LO12. Assess the legal, social and economic consequences of the organization's functioning.
  - LO18. Evaluate opportunities to use technology to optimize business efficiency.
- LO20. Coordinate aspects of business organizations that contribute to the efficiency of its work.
- LO21. Demonstrate communication, research, technological and cross-cultural skills necessary to analyze business situations, prepare, justify and present management decisions.
  - GC3. Ability to think abstractly, analyze, and synthesize.
  - GC4. Ability to apply knowledge in practical situations.
- GC5. Knowledge and understanding of the subject area and understanding of professional activities.
  - GC8. Ability to use information and communication technologies.
  - SC1. Ability to identify and describe organizational characteristics.
- SC2. Ability to analyze the results of the organization's activities, to compare them with the factors of influence of the external and internal environment.
- SC10. Ability to evaluate the work performed, ensure its quality and motivate the organization's staff.
  - SC11. Ability to create and organize effective communications in the management process.
  - SC12. Ability to analyze and structure organizational problems, to form reasonable decisions.
  - SC13. Understand the principles of law and use them in professional activities.

#### **COURSE CONTENT**

# 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 relationship of economic analysis with other sciences and disciplines. Technological stages of economic analysis.

Classification of economic analysis. Classification of analysis according to branch, time, 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.

Informational support 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 and logical) and quantitative methods of economic analysis. Descriptive and analytical methods of economic analysis.

Basic techniques of economic analysis. Method of comparison. Method of grouping. Graphical method. Balance method.

Basic methods of deterministic factor analysis. The task of deterministic factor analysis. Types of deterministic factor models. 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 and regression analysis. Single correlation. Multiple correlation. Significance and stages of correlation analysis. Methodology for calculating the main indicators of relationship. Scope and application of results of correlation analysis.

Analysis of variance. Problems of analysis of variance. Simple analysis of variance. Twofactor analysis of variance.

# 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 implementation 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 product quality. 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 cost analysis. The task of analysis. Informational 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. Costing articles. 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 impact.

Analysis of the financial results of the enterprise. Tasks of analysis of the 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 impact.

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

The task of analyzing the use of labor resources and labor costs. The importance and tasks of the analysis. General scheme of analysis. Informational sources.

Analysis of the company's personnel provision. Determining the company's personnel provision 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 growth rate of labor productivity and the level of remuneration.

# Topic 6. Analysis of the use of property, plant and equipment

Analysis of the provision of the enterprise with the means of production. Analysis of the dynamics and structure of property, plant and equipment. Study of property, plant and equipment movement and technical condition. Determining the enterprise's provision with property, plant and equipment.

Analysis of the intensity and efficiency of the use of property, plant and equipment. Indicators of efficiency and intensity of use of property, plant and equipment. Factors of change in profitability and productivity of property, plant and equipment. Methodology for determining their impact on the level of profitability and productivity of property, plant and equipment and output.

Reserves for increasing output and profitability of property, plant and equipment. The main sources of reserves of increase in output and property, plant and equipment productivity, the method of their calculation.

The list of laboratory studies in the course is given in table 2.

Table 2

The list of laboratory studies

Name of the topic and/or task	Content
Topic 1. Task 1	Practical task on analysis of fulfillment of the plan and dynamics
	of production using traditional methods of information processing
Topic 2. Task 2	Practical task on analysis of indicators using graphic tools for
	analysis of plan fulfillment and dynamics
Topic 3. Task 3	Practical task on analysis of production and sales activities of the
	enterprise
Topic 4. Task 4	Practical task on analysis of cost and profitability of the enterprise
Topic 5. Task 5	Practical task on analysis of use of labor resources at the enterprise
Topic 6. Task 6	Practical task on analysis of use of property, plant and equipment
	at the enterprise

The list of self-studies in the course is given in table 3.

Table 3

#### List of self-studies

Name of the topic and/or task	Content
Topic 1 − 6.	Study of lecture material, selection and review of literary
	sources and regulatory framework of Ukraine

Topic 1 – 6.	Preparation for laboratory classes
Topic 1 – 6.	Performance of educational and research tasks
Topic 1 – 6.	Preparation for written tests
Topic 1 – 6.	Preparation for the exam

The number of hours of lectures, laboratory studies and hours of self-study is given in the technological card of the course.

# TEACHING METHODS

The following teaching methods are used in order to acquire certain learning outcomes: lecture-discussion (topics 1–2), small group work (topics 3, 5), case studies (topic 4), competence-oriented tasks (topics 1–6).

# FORMS AND METHODS OF ASSESSMENT

S. Kuznets KhNUE uses a 100-point cumulative system for assessing the learning outcomes of students. The system for evaluating students' competencies takes into account the types of classes that, according to the program of the course, include lectures and laboratory classes, as well as self-study.

**Current control** is carried out during lectures and laboratory classes is evaluated by the amount of points scored (maximum amount is 60 points; minimum amount required is 35 points).

The final control includes current control and an exam.

**Semester control** is carried out in the form of a semester exam during the exam session (maximum score is 40 points, minimum score that allows the student to pass exam is 25 points).

The final grade in the course is determined as the amount of all points received during the current control and the exam grade.

During the teaching of the course, the following control measures are used:

Current control: competence-oriented tasks on topics (maximum score -15 points); written control works (maximum score -15 points, 3 control works during the semester, total maximum number of points -45 points).

Semester control: Graging including Exam (40 points).

More detailed information on the assessment system is provided in technological card of the course.

An example of an examination card and assessment criteria.

#### An example of an examination card

# MINISTRY OF EDUCATION AND SCIENCE OF UKRAINE SIMON KUZNETS KHARKIV NATIONAL ECONOMIC UNIVERSITY

First (bachelor) level of higher education Specialty 073 "Management" Study Programme "Business Administration" Course "Analytical support of business management"

## 1. Task: answer the theoretical test questions by choosing the answer "true" or "false":

- 1. Business Administration covers a business management on the top level
- 2. Analysis in the narrow sense is a fragmentation of an object to its constituent parts (elements) to study them as parts of a whole
- 3. Economic analysis is a scientific way of studying the essence of economic phenomena and processes, based on the dividing of its constituent parts and studying them in a variety of relationships and dependencies
- 4. According to the scope of economic object economic analysis can be macroeconomic and microeconomic
- 5. Macroeconomic analysis studies economic phenomena and processes at global and national economy and its individual sectors
- 6. Economic analysis can be classified by the scope of economic object, by sector, by the time characteristic, by the direction, by the functions, roles and tasks, etc.
  - 7. Preview (forecast) analysis is conducted before analyzed business operations
- 8. After-effect (retrospective) analysis is carried out after the implementation of business operations
  - 9. One of the principles of economic analysis is that it must be democratic
  - 10. Method of science means way of studying of its subject

Task 2. Solve the task and draw conclusions

Analyze actual and real dynamics of company's commercial product using the following data.

Deadust	Basic year		Analyzed year	
Product	Physical output	Price, \$	Physical output	Price, \$
Oil, tons	5000	200	4000	220
Natural gas, m <sup>3</sup>	80000	0.8	100000	0.7

#### Task 3. Solve the task and draw conclusions

Accomplish factor analysis of influence of change of number of workers and labor productivity of a worker on company's commercial product, using the method of absolute differences.

Indicator	Basic	Analyzed
Commercial product, million UAH	400	540
Number of workers	50	60

Approved at the meeting	of Management and Business Department,
Protocol № of « »	20 year.
Examiner	PhD, Associate Professor Andrii KOTLYK
Head of Department	Doctor of Economics, Professor Tatyana LEPEYKO

#### **Assessment criteria**

**The final grade for the exam** consists of the sum of the grades for the completion of all tasks, rounded to a whole number according to the rules of mathematics.

The algorithm for solving each task includes separate stages that differ in complexity, time-consumingness, and importance for solving the task. Therefore, individual tasks and stages of their solution are evaluated separately from each other as follows:

# Task 1 (test) -10 points:

for each correct answer -1 point.

## Tasks 2 and 3 (diagnostic) – 15 points (total – 30 points).

The maximum total number of points for the performed **diagnostic task** is 15 points, namely for methodical correctness of the calculation of indicators that must be calculated according to the task - 7 points;

disclosure of the process of solving the task by providing formulas, explanations -3 points; arithmetic correctness of calculations -2 points; substantiated conclusions -3 points.

## **Recommended references**

#### Main

- 1. Азаренков Г. Ф. Економічний аналіз : навч. посібн., Ч. 3 / Г. Ф. Азаренков, З. Ф. Петряєва, Г. Г. Хмеленко. Х. : ХНЕУ, 2004. 246 с.
- 2. Грицаєнко Г. І., Грицаєнко М. І. Аналіз господарської діяльності : навчальний посібник. Мелітополь: Люкс, 2021. 260 с.
- 3. Економіко-математичні методи та моделі: навчальний посібник / Л.М. Малярець. Харків : Вид. ХНЕУ ім. С. Кузнеця, 2014. 405 с. URL: <a href="http://www.repository.hneu.edu.ua/handle/123456789/29181">http://www.repository.hneu.edu.ua/handle/123456789/29181</a>.
- 4. Економічний аналіз : навч. посібн. / [Є. П. Кожанова, І. П. Отенко, Т. М. Сєрікова та ін.]. [3-є вид., допрац. і доп.]. X. : ВД «ІНЖЕК», 2009. 344 с.
- 5. Отенко І. П. Фінансовий аналіз : навчальний посібник / І. П. Отенко, Г. Ф. Азаренков, Г. А. Іващенко. Х. : ХНЕУ ім. С. Кузнеця, 2015. 156 с. URL: <a href="http://www.repository.hneu.edu.ua/handle/123456789/11768">http://www.repository.hneu.edu.ua/handle/123456789/11768</a>.
- 6. Петряєва 3. Ф. Аналіз господарської діяльності : навчальний посібник для іноземних студентів / З. Ф. Петряєва. Х. : ХНЕУ ім. С. Кузнеця, 2015. 372 с. URL: http://www.repository.hneu.edu.ua/handle/123456789/10444.
- 7. Савіцька  $\Gamma$ . В. Економічний аналіз діяльності підприємства : навч. посібн. /  $\Gamma$ . В. Савіцька. [3-тє вид., випр. і доп.]. К. : Знання, 2007. 668 с.
- 8. 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-formanagers-2nd-Edition-by-Gert-and-Jesper-pdf-free-downloadbooksfree.org.pdf.

#### **Additional**

- 9. Волобуєва О. Ф. Принципи економічного аналізу та їх економічна сутність у сучасних умовах господарювання / О. Ф. Волобуєва // Управління розвитком. 2012. №9. С. 113-114. URL: http://www.repository.hneu.edu.ua/handle/123456789/1065.
- 10. Економіка підприємства: компетентність і ефективність розвитку: монографія / В. С. Пономаренко, М. В. Афанасьєв, І. В. Гонтарева та інш.; за заг. ред. д.е.н., проф. Пономаренка В. С. Х. : ХНЕУ, 2013. 187 с. (Укр. мов.) Режим доступу: <a href="http://www.repository.hneu.edu.ua/handle/123456789/9478">http://www.repository.hneu.edu.ua/handle/123456789/9478</a>.
- 11. Кармазін В. А. Економічний аналіз : практикум / В. А. Кармазін, О. М. Савицька. К. : Знання, 2007. 255 с.
- 12. Концептуальні засади управління підприємством як економічною системою: Монографія / За заг. ред. к.е.н., доц. В. О. Коюда. Харків : Вид. ХНЕУ, 2007. 416 с. URL: <a href="http://www.repository.hneu.edu.ua/handle/123456789/7863">http://www.repository.hneu.edu.ua/handle/123456789/7863</a>.
- 13. Котлик А. В. Модель управління конкурентоспроможністю підприємства на основі збалансованої системи показників / А. В. Котлик // Науковий вісник. Одеський державний економічний університет. Всеукраїнська асоціація молодих науковців. Науки: економіка, політологія, історія. 2008. №16 (72). С. 82 91.
- 14. Менеджмент [Електронний ресурс]: навч.-практ. посіб. для самостійного вивчення дисципліни у схем., табл., тестах та завданнях / М. В. Афанасьєв, І. Я. Іпполітова, В. В. Ушкальов, І. Г. Муренець. Харків : ХНЕУ ім. С. Кузнеця, 2021. 391 с. Режим доступу: <a href="http://repository.hneu.edu.ua/handle/123456789/26540">http://repository.hneu.edu.ua/handle/123456789/26540</a>.
- 15. Лук'янова Т.В. Облікове забезпечення розрахункових операцій підприємства:теоретичний аспект / Т.В. Лук'янова // Управління розвитком. 2013. №23. С. 21 24. URL: http://www.repository.hneu.edu.ua/handle/123456789/4896
- 16. Зав'ялова О. Ю. Обліково-аналітичне забезпечення в управлінні фінансовим станом підприємства / О. Ю. Зав'ялова // Управління розвитком. 2013. № 1. С. 29-32. URL: http://www.repository.hneu.edu.ua/handle/123456789/2798.
- 17. Мішина С. В. Аналіз у галузях виробництва і послуг : навч. посібн. / С. В. Мішина, О. Ю. Мішин. Х. : ХНЕУ, 2008. 239 с.
- 18. Пономаренко В. С. Методологія комплексного оцінювання ефективності розвитку підприємств : монографія / В. С. Пономаренко, І. В.

- Гонтарева ; за заг. ред. докт. екон. наук, проф. В.С. Пономаренка. X. : XHEУ ім. С. Кузнеця, 2015. 404 с. URL: http://www.repository.hneu.edu.ua/handle/123456789/11912.
- 19. Часовнікова Ю. С. Система обліково-аналітичного забезпечення управління підприємством / Ю. С. Часовнікова // Сучасні проблеми управління підприємствами: теорія та практика : матеріали міжнар. наук.-практ. конф., 3-4 берез. 2020 р., м. Харків м. Торунь. Х. : ФОП Панов А. М., 2020. С. 440–442. URL: <a href="http://www.repository.hneu.edu.ua/handle/123456789/23160">http://www.repository.hneu.edu.ua/handle/123456789/23160</a>.
- 20. 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.
- 21. Kotlyk A. V. Methodical approach to analysis of volatility, uncertainty, complexity and ambiguity of the external environment = Методичний підхід до аналізу волатильності, невизначеності, складності та неоднозначності зовнішнього середовища / A. V. Kotlyk, Y. Jamal // Актуальні проблеми інноваційної економіки. 2018.  $N_2$  4. C. 65–69. Access mode: http://www.repository.hneu.edu.ua/handle/123456789/21650.
- 22. Pasewark W. R. Undestanding corporate annual reports: a practice set for financial accounting. 3rd ed. Boston, v.p. : Irwing McGrew-Hill, 1998. 64 p.
- 23. Vause B. Guide to analyzing company. London: Profile Books Ltd, 2005. 312 (VIII) p.

## **Informational resources**

- 24. Електронний каталог Національної бібліотеки України імені В. І. Вернадського. Режим доступу: www.nbuv.gov.ua.
- 25. Електронний каталог Харківської державної наукової бібліотеки імені В. Г. Короленка. Режим доступу: http://korolenko.kharkov.com.
- 26. Інтернет портал для управлінців [Електронний ресурс]. Режим доступу: http://www.management.com.ua/.
- 27. Офіційний веб-сайт Державної служби статистики України. Режим доступу: https://ukrstat.gov.ua.