

**NATIONAL UNIVERSITY OF LIFE AND ENVIRONMENTAL SCIENCES OF
UKRAINE**

The department of administrative management and foreign economic activity

“APPROVED”

The dean of the department

_____ Ostapchuk A. D.
“ ___ ” _____ 2021

“ENDORSED”

on the department meeting _____

Record № ___ dated on “ ___ ” ___ 2021

The head of the department Lutsiak V. V.

”REVIEWED”

The Guarantor of the educational program

Lutsiak V. V.

The work program of the academic discipline

BUSINESS-ANALISYS

Specialty 073 «Management»

Educational program Management

The Faculty of agrarian management

Developer: the acting head of the department of AM&FEA,
d.e.s., assoc. Prof. Lutsiak V. V.

(посада, науковий ступінь, вчене звання)

Kyiv – 2021

1. Academic discipline description

Business-analysis

(назва)

Field of knowledge, specialty, educational program, educational degree			
Educational degree	<i>Bachelor</i>		
Specialty	<i>073 Management</i>		
Educational program	<i>Management</i>		
Characteristics of the academic discipline			
Kind	Obligatory		Obligatory
General number of hours	120		150
Number of credits ECTS	4		5
Number of content modules	2		2
Course project (work) (if available)			
Form of control	<i>Exam</i>		<i>Exam</i>
Indicators of academic discipline for full-time and extramural forms of studies			
	Full-time studies		Extramural studies
Year of preparation	3	2	
Semester	5	3	
Lectures	30 zод.	30 zод.	zод.
Practical classes		zод.	zод.
Laboratory classes	30 zод.	45 zод.	zод.
Independent study	60 zод.	75 zод.	zод.
Individual classes			zод.
Number of weekly classroom hours for full-time study	4 zод.	5 zод.	

2. The aim, tasks and competencies of the academic discipline

The aim of studying the academic discipline is to acquire knowledge to analyze the company's activities using Excel.

The objectives of studying the academic discipline is theoretical and practical training of students on: analysis of enterprises as a whole and individual functional areas using Excel tools.

As a result of studying the discipline the student must

know: basic concepts, principles and principles of business analysis from the standpoint of BABOK; features of creating data sets; Excel tools; features of horizontal and vertical analysis; interpretation of analysis results; forecasting approaches and tools; principles of financial analysis in Excel; methodical approaches to building financial

plans; investment decision criteria; use of the effect of financial leverage; the influence of uncertainty on investment decisions; distribution of costs into fixed and variable; determination of costs; approaches to cost management; pricing methods; income generation; sales management; features of working with shared tables.

be able to: formulate business analysis tasks; substantiate the ways and means of solving business analysis problems; substantiate the expediency of vertical and horizontal analysis; build diagrams, draw conclusions based on the results of business analysis of data series; choose forecasting tools; interpret the obtained results; to use the coefficient analysis at definition of problems in separate spheres of activity; to assess the financial condition of the enterprise; to analyze the assets and liabilities of the balance sheet; to build a budget; calculate efficiency indicators of investment projects; justify investment decisions based on the results of business analysis; calculate the break-even point; use the method of gross costs when setting the price; use the marginal cost method when setting the price; provide information protection.

Acquisition of competencies:

general competencies (GC): GC 3. Skills in the use of information and communication technologies.

professional (special) competencies (SC): SC 2. Ability to analyze the results of the organization, compare them with the factors of external and internal environment. SC 12. Ability to formulate modeling problems, create models of objects and processes in the field of management using mathematical methods and information technology.

3. The program and structure of the discipline for:

- full term of full-time (extramural) form of study;
- shortened term of full-time (extramural) form of study

Names of content modules and topics	Number of hours													
	Full-time							Extramural						
	weeks	total	including					total	including					
			L	P	Lab	Ind	Indep		L	P	Lab	Ind	Indep	
2	3	4	5	6	7	8	9	10	11	12	13	14		
Content module 2														
METHODICAL APPROACHES TO CONDUCTING BUSINESS ANALYSIS IN EXCEL														
Topic 1. Business Analysis from the position of BABOK (Business Analysis Body of Knowledge)	1	8	2	2			4	9	2	2			5	
	2	8	2	2			4	11	2	4			5	
Topic 2. Creating data arrays. Excel tools	3	8	2	2			4	9	2	2			5	
	4	8	2	2			4	11	2	4			5	
Topic 3. Methodological bases and methods of scientific researches	5	8	2	2			4	9	2	2			5	
	6	8	2	2			4	11	2	4			5	
Topic 4. Forecasting and future estimates	7	8	2	2			4	9	2	2			5	
Total on module 1		56	14	14			28	70	14	21			35	
Content module 2														
ORGANIZATION OF ADMINISTRATIVE ACTIVITY														
Topic 5. Financial analysis. Interpretation of results. Construction of financial plans.	8	8	2	2			4	11	2	4			5	
	9	8	2	2			4	9	2	2			5	
Topic 6. Investment decisions. Sensitivity analysis of business situations	10	8	2	2			4	11	2	4			5	
	11	8	2	2			4	9	2	2			5	
Topic 7. Cost and pricing management	12	8	2	2			4	11	2	4			5	
	13	8	2	2			4	9	2	2			5	
Topic 8. Sales and marketing	14	8	2	2			4	11	2	4			5	
Topic 9. Working with shared tables. Information protection.	15	8	2	2			4	9	2	2			5	
Total on module 2		64	16	16			32	80	16	24			40	
Total 1 semester		120	30	30			60	150	30	45			75	

4. Topics of seminars

№	Topic	Number of hours
1		
2		
...		

5. Topics of practical classes

№	Topic	Number of hours
1		
2		
...		

6. Topics of laboratory classes

№	Topic	Number of hours	
	Content module 2 METHODICAL APPROACHES TO CONDUCTING BUSINESS ANALYSIS IN EXCEL		
1	<i>Topic 1. Business Analysis from the position of BABOK (Business Analysis Body of Knowledge)</i>	2	2
2	<i>Topic 2. Creating data arrays. Excel tools</i>	2	4
3	<i>Topic 3. Methodological bases and methods of scientific researches</i>	2	2
4	<i>Topic 4. Forecasting and future estimates</i>	2	4
	Content module 2 ORGANIZATION OF ADMINISTRATIVE ACTIVITY		
5	Topic 5. Financial analysis. Interpretation of results. Construction of financial plans.	2	2
6	Topic 6. Investment decisions. Sensitivity analysis of business situations	2	4
7	Topic 7. Cost and pricing management	2	2
8	Topic 8. Sales and marketing	2	4
9	Topic 9. Working with shared tables. Information protection.	2	2

7. Control questions, sets of tests to determine the level of knowledge acquisition by students.

Control questions

Price analysis.

Pricing policy.

What does pricing policy involve?

What are the most frequent reasons for determining pricing policy?

The most common goals of pricing policies are.

What are the most common pricing policy instruments?

Why do we need to determine pricing policy?

How to compare office supplies from numerous vendors or grocery costs in Excel?

How to compare competitors by price in Excel?

Sensitivity analysis.

Using data tables for performing a sensitivity analysis in Excel.

A rule of thumb: results are never final.

How to build a data table to provide a sensitivity analysis?

How to construct the matrix to provide a sensitivity analysis?

How to check the results of sensitivity analysis?

VLOOKUP function.

Excel VLOOKUP Function Syntax.

Rules, Common Mistakes and Troubleshooting while using VLOOKUP function.

Excel VLOOKUP Approximate Match Formula.

Excel VLOOKUP approximate match formula example.

Excel VLOOKUP with Dynamic Column Reference.

VLOOKUP using COLUMNS Function Explained.

Alternative to using COLUMNS is the MATCH function while using VLOOKUP function.

Excel VLOOKUP to the Left Using CHOOSE.

Excel VLOOKUP Multiple Values Formula.

VLOOKUP Multiple Criteria.

Creation of a macro.

What are Google Sheets macros?

Why use macros in Google Sheets?

Steps to Record Your First Macro.

Take a look at the code of the Google Sheets macro.

Examples of Google Sheets Macros Conclusion.

Convert all formulas to values in the current worksheet MACROS.

Convert all formulas to values throughout the Google Sheet MACROS.

Sort all sheets in a Google Sheet alphabetically MACROS.

Show all rows and columns in the current sheet MACROS.

Show all rows and columns in the whole Google Sheet MACROS.

Set a specific tab color for all sheets MACROS.

Remove all tab colors from all sheets MACROS.

Hide all sheets except active MACROS.

Show all hidden sheets in one click MACROS.

Reset filters MACROS.

Dashboard.

What is dashboard?

Planning your dashboard.

Good Dashboard Design.

Excel skills required to build Dashboard.

The right way to prepare data for quick building and updating the dashboard.

Charts.

The rules of using Excel chart formats.

The rules for communicating audience while using Excel charts.

Formatting Excel charts in the right way.

Excel chart formatting shortcuts.

Tests

1. In a complex hierarchical structure, intermediate managers can specialize:
 - a) on a functional basis;
 - b) on a substantive basis;
 - c) on a territorial basis
 - d) all answers are correct
2. Implementation of the project plan is:
 - a) creation of a final structured document based on data obtained in the previous planning stages;
 - b) development of project performance evaluation criteria;
 - c) implementation of the project plan by carrying out the works included in it;
 - d) coordination of changes for all project parameters.
3. The parameters of the project include:
 - a) project results;
 - b) rungs and stages of the life cycle;
 - c) organizational management structure;
 - d) all answers are correct
4. Defining success criteria is:
 - a) creation of a final structured document based on data obtained in the previous planning stages;
 - b) development of project performance evaluation criteria;
 - c) implementation of the project plan by carrying out the works included in it;
 - d) coordination of changes for all project parameters.
5. In a complex hierarchical structure, the leaders of intermediate links can specialize:
 - a) on a functional basis;
 - b) on a substantive basis;
 - c) on a territorial basis
 - d) all answers are correct
6. Implementation of the project plan is:
 - e) creation of a final structured document based on data obtained in the previous planning stages;
 - f) development of project evaluation criteria;
 - g) implementation of the project plan by carrying out the works included in it;
 - h) coordination of changes for all project parameters.
7. The parameters of the project include:
 - e) project results;
 - f) stages and stages of the life cycle;
 - g) organizational management structure;
 - h) all answers are correct
8. At formation of project groups approaches are used:
 - a) functional, target;

b) functional, target, design;

c) functional;

d) target.

9. General change management in project management is:

a) creation of a final structured document based on data obtained in the previous planning stages;

b) development of project performance evaluation criteria;

c) implementation of the project plan by carrying out the works included in it;

d) coordination of changes for all project parameters

10. The parameters of the project include:

a) project results;

b) rungs and stages of the life cycle;

c) organizational management structure;

d) all answers are correct

8. Methods of studying.

1. Methods based on sources of information - individual presentations.

2. According to the degree of activation of creative activity - business games (case studies).

3. According to the level of independent-cognitive activity - problem-information, problem-search and research methods.

4. Interactive methods - work in small groups.

5. Situational methods - situational tasks.

9. Forms of control.

The control of students' academic success is carried out in the forms of current and final control.

Operational and boundary (modular) current control is carried out.

Operational current control is carried out in the form of individual and group control of learning material, checking the readiness of students to perform practical classes.

Boundary (modular) current control is carried out in the form of written tests on the topics of the lecture course and practical classes (theoretical questions, test tasks, presentation of the results of group work on solving problems (case studies), problem solving).

The current control over the last content module is carried out in the last week of the academic semester.

The final control is conducted in the form of a test (5th semester) according to the schedule of semester control in the form of tests.

Tests are one of the effective tools for knowledge control. This type of control covers the control of a large amount of material; reduces, compared to the traditional survey, time spent by 50%; enables the introduction of modular training and rating control system; increases the objectivity of knowledge assessment; is a motivating factor

because students learn exactly what is being assessed; controls not only a large number of theoretical issues, but also practical skills.

10. Distribution of points received by students. Assessment of student knowledge is on a 100-point scale and is translated into national assessments according to table. 1 "Regulations on examinations and tests in NULES of Ukraine" (order of entry into force of 27.12.2019 № 1371)

Current testing and independent work									Final test (exam)	Sum
Content module 1					Content module 2					
T1	T2	T3	T4	T5	T6	T7	T8	T9	30	100
7	8	7	8	8	8	8	8	8		

Student rating, points	National assessment based on the results of the compilation	
	exams	offsets
90-100	Excellent	Credited
74-89	Good	
60-73	Fair	
0-59	Not fair	Not credited

To determine the rating of the student (listener) for mastering the discipline R_{DIS} (up to 100 points), the obtained rating for certification (up to 30 points) is added to the rating of the student (listener) for academic work. R_{AW} (up to 70 points): $R_{DIS} = R_{AW} + R_{CERT}$.

11. Methodical provision

12. Recommended literature

– basic;

1. Карлберг К. Бизнес-анализ с использованием Excel. Москва: Диалектика-Вильямс. 2020. – 576 с.
2. Карлберг К. Бизнес-анализ с использованием Microsoft Excel. Москва: Вильямс. 2002. – 464 с.
3. Сидорова А. В., Біленко Д. В., Буркіна Н. В. Бізнес-аналітика. Навчально-методичний посібник. Вінниця: ДонНУ, 2019. – 105 с.
4. Data Science для бізнесу. Як збирати, аналізувати і використовувати дані. Фоусет Т., Провост Ф. К.: Наш формат. 2019. – 400 с.
5. A guide to the business analysis body of knowledge. International Institute of Business Analysis, Toronto, Ontario, Canada. 2015. – 512 p.

6. Agile Extension to the BABOK. International Institute of Business Analysis, Toronto, Ontario, Canada. 2009. – 128 p.
 7. Business Analysis Methodology Book: Business Analyst's Guide to Requirements Analysis, Lean UX Design and Project Management at Lean Enterprises and Lean Startups
 8. Marr B. Key Business Analytics - The 60+ business analysis tools every manager needs to turn data into insights: - better understand customers, identify cost savings and growth opportunities. FT Press. 2016- 259 p.
- **auxiliary.**

1. Analitics. Решения для бизнес-анализа. <https://4analytics.ru/metodi-analiza/stati/metodi-analiza/index.html>
2. Мур Д.Х., Уэдерфорд Л.Р. Экономическое моделирование в Microsoft Excel: Пер. с англ. – М.: «Вильямс», 2004. – 1024 с.
3. Берк К. Кэйри П. Анализ данных с помощью Microsoft Excel.: Пер. с англ. – М.: «Вильямс», 2005. – 560 с.
4. Ханк Д.Э., Райтс А.Дж., Уичерн Д.У. Бизнес-прогнозирование. Пер. с англ. – М.: «Вильямс», 2003. – 656 с.
5. Персон Р. Бизнес-расчеты в Excel. Построение эффективной стратегии предприятия: Пер. с англ. – М.: «Эксмо», 2009. – 528 с.

13. Informational resources

1. Планета Excel. <https://www.planetaexcel.ru/techniques/24/>
2. Бизнес-аналитика в Excel и службах Excel (SharePoint Server 2013) <https://support.microsoft.com/ru-ru/office/%D0%B1%D0%B8%D0%B7%D0%BD%D0%B5%D1%81-%D0%B0%D0%BD%D0%B0%D0%BB%D0%B8%D1%82%D0%B8%D0%BA%D0%B0-%D0%B2-excel-%D0%B8-%D1%81%D0%BB%D1%83%D0%B6%D0%B1%D0%B0%D1%85-excel-sharepoint-server-2013-2740f10c-579d-4b40-a1d9-7beb5d38547c>