

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

**"APPROVED"**

Deputy head  
(vice-rector for scientific and pedagogical work)

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**FINANCIAL DIAGNOSTICS AND VALUE-BASED ESTIMATION OF BUSINESS**

**work syllabus of the discipline**

Branch of Knowledge	All
Specialty	All
Educational level	First (bachelor)
Educational program	All

**Type of discipline**

The language of teaching, learning and rating

**elective**

**English**

Head of the Finance Department

prof. Zhuravlyova I. V.

**Kharkiv**  
**S.Kuznets KhNUE**  
**2018**

APPROVED

at the meeting of the Finance Department  
Protocol № 1 dated August 27, 2018

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**Letter of renewal and re-approval  
of the work syllabus of the academic discipline**

Academic year	Date of the meeting of the Department – developer of the WPAD	Protocol number	Head of department signature

## Introduction

**The course annotation:** Financial diagnostics is an indispensable part of the management system of any business entity, regardless of its size, organizational and legal form, sphere of activity. It is the basis for assessing the level of efficiency of business entities, their business activity, solvency and financial sustainability, as well as for developing managerial decisions to improve their financial situation. The accounting and analytical function is a natural and integral component of the enterprise management system. This is due to several reasons. First, all objects of accounting have a cost estimate and therefore automatically fall into the scope of financial analysis. Secondly, financial resources represent a priority type of resources due to its importance from the point of view of operational and strategic management of the company's activity, as well as its unique opportunity with a minimum time lag transformed into any other kind of resources. All this requires from experts knowledge on the methodology of financial analysis taking into account the characteristics of the domestic economy and the study of world experience.

**The purpose** of the course "Financial diagnostics and value-based estimation of business" is to study the theoretical foundations for its implementation, to form a system of fundamental knowledge, skills and competencies from analytical work in the field of business efficiency diagnostics.

**Tasks of the course:**

- the study of the information base and directions of the financial diagnostics,
- the ability to analyze the composition and effectiveness of the use of economic and financial resources of the business entity;
- formation of the ability to conduct an assessment of the financial condition of the business entity;
- working out options for providing analytical conclusions obtained in the course of analysis,
- forming the ability to determine the impact of financial and economic factors on the activity of the business entity,
- the formation of the ability to identify reserves to increase the efficiency of activities and increase financial results of the business entity.

**The object of the course** is the business entity and the efficiency of its functioning.

**The subject of the course** is the theoretical basis and methodical approaches to conducting analytical calculations and assessing the effectiveness of business operations.

Year of study	<b>3</b>	
Semester	<b>6</b>	
Amount of ECTS credits	<b>5</b>	
Classroom training sessions	<b>lectures</b>	<b>16</b>
	<b>workshops</b>	<b>30</b>
	<b>laboratory</b>	<b>14</b>
Independent work		<b>90</b>
Form of final control	<b>test</b>	

## 1. Competencies and outcomes:

Competencies	Outcomes
Ability to learn and understand information about the current state and trends of financial systems development (public finances, finances of business entities, household finances, financial markets, banking system and insurance)	Ability to fundamentally organize financial diagnostics
Ability to compile and analyze financial statements, interpret and use financial and related information.	Ability to analyze the formation and effectiveness of the use of economic and financial resources of the business entity
	Ability to realize an assessment of the financial condition of the business entity
	Ability to realize an assessment of the borrower's creditworthiness
	Ability to realize an assessment of the effectiveness of the functioning of the entity
	Ability to carry out a comprehensive assessment of the financial condition of the entity

## 2. Syllabus of the academic discipline

### Content module 1: The essence and significance of financial diagnostics in ensuring the effectiveness of the business entity

#### Theme 1. The meaning and theoretical foundations of analytical activity

##### 1.1 The content, aim and objectives of the financial analysis.

The role of financial analysis in the current conditions of economic entities functioning. Approaches to the interpretation of the content of the category "financial analysis". The meaning of financial analysis. Content and components of financial analysis of the business entity. The object and subjects of financial analysis. The main purpose of financial analysis. The objectives of the financial analysis, facing analysts of different levels. Tasks of financial analysis.

##### 1.2. The main types and directions of financial analysis.

Classification of types of financial analysis: by organization of conducting, in terms of analytical research, on the subject of financial analysis, the period of conducting, for the purpose of conducting. The essence and differences between express analysis and detailed analysis of the financial condition of the business entity. The directions of financial analysis.

##### 1.3. The methods and procedures of financial analysis.

The necessity of practice using of methods of financial analysis. Methods of analysis are horizontal, vertical, comparative, coefficient method, trend, factor, margin and others. The procedures of financial analysis: detailing, grouping, adoption of averages, balance, calculations of share participation. Graphical methods of representing the results of analytical calculations.

## **Theme 2. Information support for financial diagnostic.**

### *2.1. The essence and usefulness of information for financial diagnostics carrying out.*

The essence and objectives of financial information. View and composition of information flows. The signs of usefulness of data forming information support of financial analysis of the enterprise.

### *2.2. Financial statement as the main information source of diagnostics.*

The essence, purpose and approaches to the preparation of financial statements. Basic principles of financial statements compilation. Information needs of users of financial reporting, which must be ensured. The main purpose of the analysis of financial statements and the tasks that are being solved. Main areas of analysis of financial statements.

### *2.3 The characteristics of the financial reporting main components.*

Characteristics and designation of the main components of financial statement. Balance sheet as the main source of information for financial analysis. Income statement. Other forms of financial statement and their use in the process of financial analysis.

## **Content module 2: Economic and financial resources of the business entity analysis**

### **Theme 3. Assets analysis.**

#### *3.1. Assets, their structure and classification.*

Assets as the embodiment and reflection of the property of the enterprise. Classification of assets of the enterprise. The role of asset analysis in financial diagnostics. The essence and scheme of the structure of assets. Optimization of the assets of the enterprise, its stages.

#### *3.2. Analysis of dynamics and structure of assets*

Preparation of analytical tables describing the structure and dynamics of enterprise property. Main directions of analytical research and formation of analytical conclusions. Essence, composition and features of financing of non-current and current assets.

#### *3.3 Asset Management Ratios.*

General characteristics of assessment indicators of the assets. Factors of depreciation and suitability of fixed assets, coefficients of renewal and disposal of fixed assets, index of a constant asset, the ratio of real value of property, depreciation rate of intangible assets, profitability of all property of the enterprise.

### **Theme 4. Current assets analysis**

#### *4.1. Current assets, their essence and classification.*

The essence and main economic features of current assets. The classification of current assets. The purpose and information support of current assets analysis. Features of the structure of current assets, depending on the characteristics of the enterprise.

#### *4.2. The main indicators of the assessment of the status, structure and efficiency of the use of current assets of the enterprise.*

General assessment of the composition, dynamics and structure of the current assets. Causes and consequences of changing their structure. Indicators of the state and efficiency of use of working capital. Net working capital, methods of its calculation.

Net working capital security ratio. Working capital efficiency ratios: turnover rate, load factor, efficiency (profitability), return on working capital.

### **Theme 5. Capital and financial recourses analysis**

#### *5.1. Analysis of the availability, composition and dynamics of capital sources.*

The necessity of analysis of the composition and structure of finance resources. Equity and loans, principal differences between them. Structure of equity. Classification of debt capital. The criteria by which the distinction between own and borrowed capital is determined. Key indicators of the capital structure.

### *5.2. Return on capital analysis.*

The general characteristics of return on equity ratios. Profitability of invested capital. Return on equity. DuPont factor model, its components.

## **Theme 6. Cash flow analysis.**

### *6.1. Cash flow and its classification.*

The essence and classification of cash flows: by the sources of their formation, by the scale of maintenance of the economic process, by the method of determining the volume, on the level of adequacy of the volume, on the continuity of the formation, in the direction of the movement of funds.

### *6.2. Cash flow analysis.*

The purpose of the cash analysis of the business entity. Blocks of analytical procedures included in the system of effective cash management. Calculation of duration of operational and financial cycles. Purpose and tasks of the analysis of cash flow. Preparation of an analytical table for the analysis of cash flow. Analytical indicators of solvency, reflecting the ratio of income and payments of the enterprise. Performance indicators for cash flow management. Estimation of optimal level of money

## **Content module 3. Financial position analysis and value-based estimation**

## **Theme 7. Liquidity analysis.**

### *7.1. The economic essence of liquidity and solvency of the business entity.*

The essence of the concepts of liquidity and solvency of the business entity, the relationship and the differences between them. Key features of liquidity and solvency. Current and perspective solvency. Liquidity of assets, liquidity of the balance sheet and liquidity of the enterprise. Interconnection of liquidity and solvency. Insolvency as an economic category.

### *7.2. Liquidity ratio analysis.*

Balance sheet liquidity analysis. Grouping of assets of an enterprise on the degree of their liquidity. Grouping of liabilities on maturity of obligations. Studying relationships between defined groups of assets and liabilities. Liquidity ratio analysis: Current Ratio, Acid-Test (or Quick) Ratio.

## **Theme 8. Financial sustainability analysis.**

### *8.1. The essence and factors of the financial stability.*

The concept of financial stability, financial equilibrium and financial sustainability. The limits of financial stability of enterprises. Factors affecting financial sustainability of enterprises: three levels (generalization, derivatives: external and internal and detailing).

### *8.2. Financial Leverage (Debt) Ratios analysis.*

Financial Leverage (Debt) Ratios: Debt-to-Equity Ratio, Debt-to-Total-Assets Ratio, Long-term Ratio. Coverage Ratios: Interest Coverage Ratio.

### *8.3. The estimation of financial stability reserve.*

The essence and the necessity of determining the financial stability. Using of margin analysis to calculate the financial stability reserve. Determination of financial stability reserve.

## **Theme 9. Business activity analysis .**

### *9.1. Theoretical aspects of assessment of business activity.*

The essence and characteristics of business activity of the enterprise. Levels of business activity of the enterprise. Factors determining the level of business activity of enterprises: external (international, national, market) and internal. The purpose of business activity analysis.

## 9.2. *Activity Ratios* analysis.

Activity Ratios: Receivables Activity: Receivable turnover (RT) ratio, Receivable turnover in days (RTD), Aging Accounts Receivable, Payable turnover in days (PTD), Inventory Activity, Inventory turnover in days (ITD). Operating Cycle versus Cash Cycle. Total asset turnover (capital turnover).

## **Theme 10. Profitability analysis.**

### 10.1. *Contents, tasks and sources of information for the profitability analysis.*

The essence and factors that affect the size of the company's absolute profit. The objectives of analysis of financial results. Sources of analytical information for analysis.

### 10.2. *Income statement analysis.*

Income statement. Revenues and Expenses. Net sales, cost of goods sold, selling, general, and administrative expenses, earnings before interest and taxes (EBIT), interest expense, earnings before and after taxes.

### 10.3. *Profitability Ratios analysis.*

Profitability Ratios: Profitability in Relation to Sales, Net profit margin, Return on investment (ROI), ROI and the Du Pont Approach. Return on Equity (ROE). ROE and the Du Pont Approach.

## **Theme 11. The concept of value-oriented management in financial science**

11.1. Economic content of value. Approaches to the definition of the concept of "value" in modern economic science. Factors of external and internal environment that affect the value of the enterprise. Types of cost. Economic added value as a basis for valuing an enterprise.

### 11.2. The essence of value-oriented enterprise management.

Application of approaches of cost-oriented management at world-class enterprises. Performance Criteria for Cost-Oriented Management.

11.3. Value of value management in the system of development and enterprise management.

Indicators for evaluating the effectiveness of cost-oriented enterprise management. Areas of optimization of functioning of the enterprise on the criterion of value.

## **Theme 12. Income Approach to Business Valuation**

12.1. In income approach of business valuation, a business is valued at the present value of its future earnings or cash flows. Future earnings/cash flows are determined by projecting the business's earnings/cash flows and adjusting them for changes in growth rate, cost structure and taxes, etc. The present value is determined using a discount rate which reflects the required rate of return of the investor.

12.2. Income approach is a powerful and effective approach because unlike market approach i.e. relative valuation, it doesn't rely on any past similar transactions. However, since value is very sensitive to estimates of growth rate and required rate of return, these inputs must be sound.

12.3. Income approach has two main variants: discounted cash flows approach and capitalization of earnings.

## **Theme 13. Cost and Comparative Approaches to Business Valuation**

13.1. Cost Approach is based not on the income, but on the costs of organizing a particular kind of business. Thorough reassessment allows to drop ballast. Subtracting all liabilities, you can deduce the exact market value of the company. Cost approach includes only existing assets that eliminates irrelevant variables. It is effective for the evaluation of young companies, holdings and investment companies. The disadvantage is the lack of the long term business forecasts. In assessing two different methods are used: the net assets and the liquidation value. Due to the frequent unreliability of the carrying and market values

of the company, this method is not particularly in demand. Each investor and buyer decides what kind of valuation approach to use. Sometimes it is advisable to use several methods to reduce the risk of mistake.

13.2. Comparative Approach is based on a comparative analysis of the main competitors in the market, which produce similar goods. The prerequisite is a similar business environment. The main sources of information are the stock markets. The advantage of this method is that the value of the company can be estimated from the results of share trades, and the price reflects a specific position in the market at any given time. It includes the method of transactions, capital market and industry indicators. The indicator of capital shows the position of the company in relation to the direct competitors. With the valid data the valuation of business becomes quite accurate. If the indicators of compared enterprises are different, the multiples (price/earnings, price/cost etc.) are applied.

### 3. The order of rating

The system for assessment the effectiveness of the training of specialists in the discipline provides that the results of the academic discipline should take into account lectures, practice and laboratory classes, as well as the performance of independent work. Assessment of the developed competencies among students is based on a 100-point accumulation system. Response to the Provisional Regulations "On the ordering of assessment of the results of student learning for the accumulation system" S. Kuznets KhNEU, control measures include:

current control, carried out during the semester during lectures, practical and laboratory classes, and estimated by the sum of the points scored;

modular control, which is conducted taking into account the current control over the corresponding content module and is aimed at an integrated assessment of the student's learning outcomes after studying the material from the logically completed part of the discipline-content module.

Current control of this discipline is carried out in the following forms:

active work at lecture classes;

active participation in practice and laboratory classes.

Modular control of this discipline is carried out as a colloquium. The colloquium is a form of verification and assessment of students' knowledge in the system of education in higher education institutions. Its conducted as an intermediate mini-exam on the teacher's initiative.

*The procedure for carrying out the current assessment of students' knowledge.* The current evaluation is carried out during the practical and laboratory classes and is aimed at checking the level of readiness of the student to perform specific activities and the practical implementation of the existing competencies by the accumulation of ball scoring system according to the following criteria:

understanding, degree of assimilation of the theory and methodology of the problems under consideration;

the degree of assimilation of the actual material of the discipline;

the ability to combine theory with practice when considering situational tasks, solving tasks, performing calculations in the process of performing individual tasks and tasks submitted for consideration in an audience;

logic, structure, arithmetic correctness and style of material presentation in writing, ability to summarize information and draw conclusions.

*Criteria for evaluating non-auditory independent work of students.* The general criteria for evaluating non-audited independent work of students are: the depth and complexity of



knowledge, the level of thinking, the ability to systematize knowledge on specific topics, the ability to make informed conclusions, the possession of categorical apparatus, skills and techniques of performing practical tasks, the ability to find the necessary information, organize it and present it to others.

The student should be certified if the sum of the points earned on the results of the final / semester test of success is equal to or exceeds 60. The total score in the points for the semester is: "60 or more points is counted", "59 and less points are not counted", and is entered in the Record of Success of the discipline. In case of getting less than 60 points student obliged to pay off after the end of the examination session in the deadline set by the dean of the faculty, but not later than two weeks after the beginning of the next semester.

### Ordering of points in weeks

Themes of the content module			Lectures	Practice classes	Laboratory classes	Colloquium	Total
<b>Content module 1:</b> The essence and significance of financial diagnostics in ensuring the effectiveness of the business entity	Theme 1	1 week	1	2	-	-	3
	Theme 2	1 - 2 week	1	2	-	-	3
<b>Content module 2:</b> Economic and financial resources of the business entity analysis	Theme 3	2 - 4 weeks	1	4	1	-	6
	Theme 4	4 - 6 weeks	1	3	1	-	5
	Theme 5	6 - 7 weeks	2	4	2	-	8
	Theme 6	7 - 8 weeks	1	3	1	15	20
<b>Content module 3.</b> Financial position analysis and value-based estimation	Theme 7	9 - 10 weeks	2	4	2	-	8
	Theme 8	11 weeks	2	3	2	-	7
	Theme 9	12 weeks	1	3	1	-	5
	Theme 10	13 weeks	1	3	1	-	5
	Theme 11	14 weeks	1	3	1	-	5
	Theme 12	15 weeks	1	3	1	-	5
	Theme 13	16 weeks	1	3	1	15	20
			16	40	14	30	100

### Scale of assessment: national and ECTS

The amount of points for all types of educational activities	Rating ECTS	Score on a national scale
		for the test
90 – 100	A	credited
82 – 89	B	
74 – 81	C	
64 – 73	D	
60 – 63	E	
35 – 59	FX	not credited
1 – 34	F	

#### 4. Course Learning Resources

1. Van Horne, James C. Fundamentals of financial management / James C. Van Horne, John M. Wachowicz. – 13th ed., 2008. - 719 p.
2. Берест М. М. Фінансовий аналіз : навч. посіб. / М. М. Берест. – Харків: ХНЕУ ім. С. Кузнеця, 2017. – 164 с.
3. Вахович І. М. Фінансовий менеджмент та фінансовий інжиніринг бізнес-процесів : магістерський курс [навч. посіб. в 2-х т.]. Т. 1. Фінансовий менеджмент бізнес процесів / І. М. Вахович. – Луцьк : СПД Ж. В. Гадяк, друкарня «Волиньполіграф»™, 2013. – 604 с.
4. Фінансовий аналіз : навч. посіб. / [М. Д. Білик, О. В. Павловська, Н. М. Притуляк, Н. Ю. Невмержицька.] – Київ : КНЕУ, 2005. – 592 с.
5. Бланк И. А. Основы финансового менеджмента (в 2-х т.). Т. 1 – 2-е изд. перераб. и доп. / И. А. Бланк. – Київ : Ника-Центр, Эльга, 2004. – 624 с.
6. Михайлюк О. Як читати та аналізувати фінансову звітність : посібник для членів наглядових рад та керівників акціонерних товариств / О. Михайлюк. – Київ : Міжнародна Фінансова Корпорація, 2004. – 108 с.
7. Хелферт Э. Техника финансового анализа / Э. Хелферт / пер. с англ. ; под ред. Л. П. Белых. – 10-е изд. – Санкт-Петербург : Питер, 2003. – 640 с.

#### Information resources

8. Офіційний сайт Агентства з розвитку інфраструктури фондового ринку України [Електронний ресурс]. – Режим доступу : [www.smida.gov.ua](http://www.smida.gov.ua).
9. Офіційний сайт Державного служби статистики України [Електронний ресурс]. – Режим доступу : [www.ukrstat.gov.ua](http://www.ukrstat.gov.ua).
10. Про затвердження Положення про визначення банками України розміру кредитного ризику за активними банківськими операціями: Постанова Національного банку України від 30.06.2016 р. № 351 (зі змінами, внесеними згідно з Постановою НБУ від 16.01.2017 № 5) [Електронний ресурс] – Режим доступу : <http://zakon3.rada.gov.ua/laws/show/v0351500-16>.