Syllabus
Course Program

Business valuation

Specialty
D3 – Management

Institute
Institute of Education and Science in Economics, Management and International Business

Specialization
-

Department
Management (204)

Educational program
Business administration (in English

Course type
Mandatory

Level of education
First (bachelor's level)

Form of study
Full-time,

Semester
7

Language of instruction
English

Lecturers and course developers



First name and surname

Mariia Foshchii

mariia.foshchii@khpi.edu.ua
PhD in Management, Associate Professor of Department of Management

Authored and co-authored over 40 scientific and methodological publications. Courses: Business Valuation, Fundamentals of Business analysis, Social design, Fundamentals of fundraising, Competitiveness management, Business Planning

More about the lecturer on the department's website

General information

Summary

The course covers the theoretical foundations of business valuation and methodological tools for business valuation; modern methodological approaches to business valuation are considered. Students will gain ability to evaluate a company's current financial position, assess operating performance, and identify alternate courses of action.

Course objectives and goals

Gaining in-depth knowledge of the laws, principles and methodology of business valuation. Mastering the applied tools for estimating the market value of enterprises. To understand and be able to apply methods of valuing any type of company, using discounted cash flow models and other commonly used methods.

Format of classes

Lectures, workshops, consultations, self-study, individual assignment (control work). Final control in the form of exam.

Competencies

SC02. The ability to analyze the results of organization activity, to compare them with the factors of the external and internal environment.
SC03. The ability to identify prospects of organization development.
SC10. The ability to work in a team and to establish interpersonal interaction in solving professional tasks.
SC16. The ability to generate business ideas, to justify the feasibility and form of their implementation as well as to present them to stakeholders.

Learning outcomes

LO 06. To show skills of search, collecting, and analysis of information, calculation of indicators to substantiate management decisions.
LO 12. To evaluate the legal, social, and economic implications of an organization's functioning.
LO 17. To conduct researches individually and/or in a group under the leadership of the leader.
LO 18. To be able to plan business activities and substantiate project proposals.

Student workload

The total volume of the course is 180 hours (6 ECTS credits): lectures – 32 hours, workshops – 32 hours, self-study – 116 hours.

Course prerequisites

To successfully complete the course, you must have knowledge and practical skills from the following courses: "Higher mathematics", "Economic Statistics", "Fundamentals of Entrepreneurship", "Enterprise Economics", "Managerial accounting", "Business planning", "Fundamentals of business analysis", "Business modeling and projecting".

Features of the course, teaching and learning methods, and technologies

Lectures are conducted in an interactive form using multimedia technologies. Practical classes are conducted using a project approach and focus on using modern information technologies. Study materials are available to students through Microsoft Teams.

Program of the course

Academic classes

Lectures

Topics of the lectures	Hours
Topic 1. Theoretical foundations of business evaluation. (Lecture 1-2) Business and enterprise as objects of valuation. The concepts of value, price, cost, and different bases of value (market value, investment value, fair value, and liquidation value). Principles, purposes, types, and key factors affecting business value. Valuation premises, assumptions, and the role of valuation dates.	4
Topic 2. Methodological tools and standards for business valuation. (Lecture 3-4) General characteristics of methodological tools and professional valuation activities. International and national valuation standards, valuation procedures, and requirements for valuation assignments. Classification, sources, reliability, and analysis of information used in business valuation. Valuation models, data inputs, documentation, and preparation of valuation reports.	4
Topic 3. Modern methodological approaches to business valuation. (Lecture 5-7) The income, market (comparative), and asset-based approaches to business valuation. Methods of the income approach, including discounted cash flow and capitalization of income; methods of the market approach based on comparable companies and transactions; and asset-based	6

valuation methods. Selection, application, comparison, and reconciliation of valuation approaches, including sensitivity analysis and the assessment of valuation uncertainty.	
Topic 4. Valuation of real estate. (Lecture 8-10) Characteristics of real estate as an object of valuation. Principles, methods, and regulatory framework for land valuation in Ukraine, including normative and expert monetary valuation. Valuation of buildings, structures, and other real estate objects using income, market, and cost approaches. Factors affecting property value, depreciation, and highest and best use analysis.	6
Topic 5. Valuation of machinery and equipment. (Lecture 11-12) Classification and characteristics of machinery, equipment, and technical assets as objects of valuation. Factors affecting their value, including physical condition, remaining useful life, and technological obsolescence. Cost, market, and income approaches to the valuation of machinery and equipment. Methods of estimating physical, functional, and economic depreciation.	4
Topic 6. Valuation of intangible assets. (Lecture 13-14) The essence, characteristics, and classification of intangible assets. Identification and valuation of intellectual property, trademarks, patents, software, brands, customer relationships, and databases. Cost, market, and income approaches to intangible asset valuation, including the relief-from-royalty and multi-period excess earnings methods. Factors affecting the economic life and market value of intangible assets.	4
Topic 7. Special cases and emerging issues in business valuation. (Lecture 15-16) Business valuation for monitoring, investment decisions, mergers and acquisitions, restructuring, insolvency, and bankruptcy. Valuation of virtual assets and financial instruments. The impact of ESG factors, digital transformation, data, and artificial intelligence on business value. Valuation under conditions of uncertainty, scenario analysis, and sensitivity testing.	4
Total hours	**32**

Workshops

Topics for workshops/seminars	Hours	Weighting coefficients *a*
Topic 1. Determination of value and its types. Identification of the valuation object, purpose, and date of valuation. Determination of different bases and types of value, including market, investment, fair, and liquidation value. Analysis of practical situations requiring different valuation bases.	2	0,0625
Topic 2. Valuation standards, information sources and data analysis. Identification of information requirements for business valuation. Analysis of financial statements, market information, and other data sources; assessment of data reliability and relevance. Practical application of valuation standards and preparation of the initial valuation assignment.	2	0,0625
Topic 3. Financial analysis and preparation of valuation data. Analysis of company financial statements and key financial indicators. Assessment of profitability, liquidity, solvency, and business performance. Normalization of financial information and preparation of data for business valuation.	2	0,0625
Topic 4. Application of the income approach. Cash flow forecasting. Forecasting business revenues, operating expenses, and free cash flows. Determination of the forecast period, terminal value, and key assumptions for discounted cash flow valuation. Preparation of a basic DCF model.	2	0,0625

Topic 5. Application of the income approach. Discount rates and sensitivity analysis. Calculation and selection of discount rates, including WACC and CAPM components. Determination of present value and terminal value. Sensitivity and scenario analysis of business valuation results.	2	0,0625
Topic 6. Application of the comparative (market) approach. Selection of comparable companies and transactions. Calculation and application of valuation multiples (P/E, EV/EBITDA, EV/Sales). Making adjustments for differences between the evaluated company and comparable businesses.	2	0,0625
Topic 7. Application of the asset-based approach. Identification and valuation of company assets and liabilities. Calculation of adjusted net asset value and assessment of goodwill. Application of the asset-based approach to business valuation.	2	0,0625
Topic 8. Comparison and reconciliation of business valuation results. Comparison of business valuation results obtained using income, comparative, and asset-based approaches. Selection and justification of appropriate methods and weighting of valuation results. Preparation of a reasoned business valuation conclusion.	2	0,0625
Topic 9. Valuation of land. Identification of land plots as objects of valuation and analysis of factors affecting their value. Application of normative and expert monetary valuation methods in Ukraine. Practical calculations of land value using relevant valuation approaches.	2	0,0625
Topic 10. Valuation of buildings and structures. Application of comparative, income, and cost approaches to the valuation of buildings and structures. Calculation of replacement cost and assessment of depreciation. Determination of the market value of real estate based on practical cases.	2	0,0625
Topic 11. Identification and classification of machinery and equipment. Identification and classification of machinery and equipment as valuation objects. Analysis of technical condition, physical wear, remaining useful life, and technological obsolescence. Preparation of initial data for machinery and equipment valuation.	2	0,0625
Topic 12. Application of valuation approaches to machinery and equipment. Application of cost, comparative, and income approaches to machinery and equipment valuation. Calculation of replacement cost, reproduction cost, and depreciation adjustments. Practical determination of the value of selected equipment.	2	0,0625
Topic 13. Identification and classification of intangible assets. Identification and classification of intangible assets in business activities. Analysis of intellectual property rights, patents, trademarks, software, brands, customer relationships, and databases. Selection of appropriate valuation approaches and methods for different types of intangible assets.	2	0,0625
Topic 14. Application of methods for intangible asset valuation. Application of cost, market, and income approaches to intangible asset valuation. Practical calculations using the relief-from-royalty and multi-	2	0,0625

period excess earnings methods. Analysis of economic life, royalty rates, and expected economic benefits.		
Topic 15. Business valuation in special situations. Valuation of businesses in mergers and acquisitions, restructuring, insolvency, and liquidation. Analysis of control premiums, minority interest discounts, and marketability adjustments. Introduction to the valuation of virtual assets and other non-traditional valuation objects.	2	0,0625
Topic 16. Modern valuation challenges: ESG, AI and integrated business valuation. Assessment of the impact of ESG factors, digitalization, data, and artificial intelligence on business value. Application of scenario analysis and risk assessment under conditions of uncertainty; verification of data and assumptions used in valuation models. Integrated business valuation case study and preparation of a brief valuation report.	2	0,0625
Total hours	**32**	$\sum_{i=1}^{n} a_i$

Self-study

Self-study includes processing of materials provided in lectures and preparation for practical classes (16 h), independent study of specific issues and additional information (42 h), as well as completing of an individual control work (46 h) and preparation for tests (12 h).

Work on theoretical materials

Topics for self-study	Hours
Topic 1. Evolution of business valuation theory and value creation. Historical development of business valuation concepts. Evolution of approaches to understanding and measuring business value. Value creation and value drivers in modern enterprises.	3,5
Topic 2. Macroeconomic factors affecting business value. The impact of inflation, interest rates, exchange rates, and economic cycles on business value. Capital market conditions and investment climate. Country risk and economic uncertainty.	3,5
Topic 3. Industry-specific factors in business valuation. Characteristics of business valuation in manufacturing, services, retail, IT, and other industries. Industry life cycles, capital intensity, and sector-specific value drivers. Industry benchmarks and performance indicators.	3,5
Topic 4. Valuation of start-ups and high-growth companies. Specific features of valuing start-ups and innovative enterprises. Valuation challenges associated with limited financial history and negative cash flows. Venture capital valuation method and milestone-based valuation.	3,5
Topic 5. Valuation of small and medium-sized and family-owned businesses. Specific characteristics of SMEs and family businesses as valuation objects. Owner dependence, key-person risk, customer concentration, and business succession. Factors affecting the transferability and continuity of business value.	3,5
Topic 6. Corporate governance and ownership structure in business valuation. The relationship between corporate governance quality and business value. Ownership concentration, shareholder rights, voting rights, and corporate control. The impact of governance risks on investment attractiveness.	3,5
Topic 7. Cross-border business valuation.	3,5

Specific features of valuing businesses operating in international markets. Currency risks, country risk, political and regulatory factors. Cross-border investment considerations and international comparability of valuation data.	
Topic 8. Real options in business valuation and investment decisions. The concept of real options and their application in business valuation. Options to defer, expand, contract, or abandon investment projects. Decision tree analysis and managerial flexibility under uncertainty.	3,5
Topic 9. Probabilistic methods and Monte Carlo Simulation in business valuation. The concept of probabilistic valuation and its application. Random variables, probability distributions, and simulation of financial outcomes. Interpretation of simulation results for business decision-making.	3,5
Topic 10. Valuation uncertainty, model risk and professional judgement. Sources and types of valuation uncertainty. Model risk, limitations of valuation assumptions, and data reliability. Professional judgement, documentation, and communication of valuation uncertainty.	3,5
Topic 11. Business valuation for financial reporting and impairment testing. The role of valuation in financial reporting. Fair value measurement and impairment testing of assets and goodwill. Cash-generating units and the application of valuation results in financial statements.	3,5
Topic 12. Human capital and organizational capital as value drivers. The economic contribution of employee competencies, knowledge, and organizational capabilities. Human capital, organizational culture, and knowledge management as sources of competitive advantage. Challenges of measuring and reflecting these factors in business value.	3,5
Total hours	**42**

Topics for individual assignments

As part of this course, students are required to complete an individual assignment (control work) involving the practical application of business valuation methods to a selected real operating enterprise. The assignment is aimed at developing students' skills in analyzing a company's financial and operational performance, identifying key value drivers, selecting and applying appropriate valuation approaches, and determining the estimated value of the business based on relevant financial, market, and other available information. The individual assignment is an independent student task designed to consolidate and deepen knowledge of the course topics through practical application, while receiving the necessary guidance and consultations from the instructor.
The results of the control work must be presented in the form of a properly structured and formatted written report, in accordance with the general requirements for academic assignments and the methodological guidelines for completing the individual assignment in the discipline "Business Valuation".

Topic for individual assignment (control work)

Comprehensive business valuation of a selected enterprise	
Total hours	**46**

Non-formal education

Non-formal education includes professional courses/training, civic education, online education, professional internships, etc. The elements of non-formal education recommended in the syllabus can be recognized through a simplified procedure without additional validation of the results (without creation of a subject committee).

Recommended training courses, internships

1. Online test "Business Valuation Fundamentals Certification"

https://scienceofapps.com/certification/business-valuation/
2. Online course "Principles of Finance (BUS202)"
https://learn.saylor.org/course/bus202
3. Online course "Estimating the Cost of Equity"
https://www.open.edu/openlearn/money-business/estimating-the-cost-equity
4. Online course "Financial Management (BUS601)"
https://learn.saylor.org/course/bus601
5. Online course "Introduction to Sustainable Finance & the SDG Finance Academy"
https://sdgfinance.undp.org/courses/introduction-sustainable-finance-sdg-finance-academy

Literature, training materials, and information resources

Main literature

1. Koller T., Goedhart M., Wessels D. Valuation: Measuring and Managing the Value of Companies. 7th Ed. / McKinsey & Company: John Wiley & Sons, Inc., Hoboken, New Jersey., 2020. – 899 p
2. Sinem Derindere Köseoğlu. Valuation Challenges and Solutions in Contemporary Businesses. 1st Ed. / IGI Global, 2019. - 324 p.
3. European Business Valuation Standarts. 1st Ed. / The European Group of Valuers' Associations, 2020. - 212 p.
3. Parker D. International Valuation Standards: A Guide to the Valuation of Real Property Assets. / John Wiley & Sons, Ltd, 2016. – 268 p.
4. Financial analysis and business valuation (FABV): Study notes. 2nd Ed. / Directorate of Studies: The Institute of Cost Accountants of India (ICAI), 2014. - 698 p.
5. Casey Karlsen, Seth Webber. A Field Guide to Business Valuation: For Owners and Leaders of Private Companies. / Business Valuation Resources, LLC, Portland, 2022. – 206 p.
6. James R. Hitchner. Financial valuation workbook: step-by-step exercises and tests to help you master financial valuation. 5th Ed. / Wiley, Hoboken, New Jersey, 2025. – 268 p.

Additional materials

1. Краснокутська Н.С., Коптєва Г.М. Оцінка бізнесу : навч. посіб. для студентів економічних спеціальностей.– Харків : НТУ «ХПІ», 2021. – 229 с.
2. Єрмоленко О. А., Лисьонкова Н. М. Оцінка вартості бізнесу: Конспект лекцій. – Харків: УкрДУЗТ, 2021. – 75 с.

Information resources

1. Official website of the State Statistics Service of Ukraine. Access mode: www.ukrstat.gov.ua
2. Official website of the Ministry of Economy of Ukraine. Access mode: www.me.gov.ua
3. Закон України «Про оцінку майна, майнових прав та професійну оціночну діяльність в Україні» № 2658-III від 12.07.2001 (чинна редакція від 01.01.2025)
4. Національний стандарт № 1 «Загальні принципи оцінки майна та майнових прав», затвердженого постановою Кабінету Міністрів України від 10 вересня 2003 р. № 1440 (із змінами, внесеними згідно з Постановою КМУ № 886 від 09.08.2022).

Grading system

The final grade for the educational component is determined by the lecturer and is based on topics, types of activities, etc., in accordance with the syllabus. It is an integrated assessment of the results of all types of student learning activities. The final grade should reflect all the grades for the different parts of the educational process, taking into account their weighting coefficients k:

Continuous assessment (during workshops, seminars, laboratory classes) k_1	Control works (if any), k_2	Individual assignment (if any), k_3	Final assessment (for courses with exams), k_4
0,4	0,1	0,4	0,1

The sum of the coefficients must be equal to one: $k_1 + k_2 + k_3 + k_4 = 1$. The weighting coefficients for the final assessment are decided by the course developer.
The final grade is calculated using the following formula:

$$G = C \cdot k_1 + K \cdot k_2 + I \cdot k_3 + E \cdot k_4$$

where: C – weighted average score for the continuous assessment
I – individual assignment grade
K – weighted average score for the continuous assessment
E – final assessment (exam) grade

$$C = \frac{C_1 \cdot a_1 + C_2 \cdot a_2 + \ldots + C_n \cdot a_n}{\sum_{i=1}^{n} a_i}$$

де: a_i - weighting coefficient for each workshop (seminar) or laboratory class.

$$K = \frac{K_1 \cdot b_1 + K_2 \cdot b_2 + \ldots + K_m \cdot b_m}{\sum_{i=1}^{m} b_i}$$

де: b_i - weighting coefficient for each control work.

The assessments for each component (C, K, I, etc.) are based on a 100-point scale in line with the provisions of the "Criteria and System for Assessing Knowledge and Skills, and Rating of Higher Education Students" of the National Technical University "Kharkiv Polytechnic Institute."

The final grade is finalized as the calculated value of G, rounded up to the nearest integer.

Grading scale

Total points	National	ECTS
90–100	Excellent	A
82–89	Good	B
75–81	Good	C
64–74	Satisfactory	D
60–63	Satisfactory	E
35–59	Unsatisfactory (requires additional learning)	FX
1–34	Unsatisfactory (requires repetition of the course)	F

Norms of academic integrity and course policy

Students must adhere to the Code of Ethics of Academic Relations and Integrity of NTU "KhPI": to demonstrate discipline, good manners, kindness, honesty, and responsibility. Conflict situations should be openly discussed in academic groups with a lecturer, and if it is impossible to resolve the conflict, they should be brought to the attention of the Institute's management.
Regulatory and legal documents related to the implementation of the principles of academic integrity at NTU "KhPI" are available on the website: http://blogs.kpi.kharkov.ua/v2/nv/akademichna-dobrochesnist/

Approval

Approved by 30.08.2025  Head of the department
Nataliia SHMATKO

30.08.2025  Guarantor of the educational program
Olena PROKHORENKO