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Course Package “Business Valuation”

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| Work Package | WP3: Development of Course Materials for the Reformed MA Programmes, Deliverable 3.1 |
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Erasmus+ Capacity Building in Higher Education Project:

“Reforming Master Programmes in Finance in Armenia and Moldova” (REFINE)

www.reforming-finance.eu | Project No. 585784-EPP-1-2017-1-AT-EPPKA2-CBHE-JP

Document History

| Version | Date | Author(s) | Description |
|---------|------------|------------------------------------|--|
| 1 | 30.11.2019 | Andrei MULIC | First draft of WP3 output - Development of Course Materials for the Reformed MA Programmes |
| 2 | 27.01.2020 | Srdjan REDZEPAGIC | Draft 2 |
| 3 | 30.01.2020 | Andrei MULIC, Srdjan REDZEPAGIC | Draft 3 |
| 4 | 07.02.2020 | Andrei MULIC, Srdjan REDZEPAGIC | FINAL |

Disclaimer:

This project has been funded with support from the European Commission. This publication [communication] reflects the views only of the author, and the Commission cannot be held responsible for any use which may be made of the information contained therein.

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1. General information about the course

Explanation: Please fill in the table below.

| | |
|--|--|
| Title of the course (as specified in the reformed curriculum) | Business valuation |
| Name of the teacher | Andrei Mulic |
| Novelty of the course (please select as appropriate) | This course is an updated and revised version of a course which already existed in the curriculum |
| Year of the course in the curriculum | YEAR the 1st |
| Semester of the course in the curriculum | The 2nd semester |
| Language of instruction of the course | Romanian/ Russian/ English |
| Number of ECTS credits | 7 |

2. Learning outcomes of the course

Explanation: Please specify the learning outcomes of the course.

Transversal competencies (General knowledge, skills or competences):

TC2. Self-assessment from the perspective of quality concerns, adaptation to new situations / conditions, openness to novelty and assuming responsibilities, roles and functions of leading the work of professional groups or entities in the bussines valuation spher;

TC3. Identifying personal development opportunities to diversify and enrich professional skills of a business appraiser, digital (IT) and financial calculation in the in order to calculate the value of national and foreign companies;

TC4. Communication in a foreign language (English) for professional purposes in order to generate a report on the assessment and explain the results of the assessment for customers in English.

Professional competencies:

PC 1: Advanced use of national and international accounting standards and accounting techniques, national and international tax law and practice, and interdisciplinary approach to economic operations to provide financial, tax and investment consulting services;

PC 2: Creation, autonomously and in group, design and implementing of strategies, programs and complex regarding business management using theoretical and practical knowledge;

PC 3: Identifying and using modern techniques and methods of financial management, financial reporting and diagnosing the economic and financial situation of the enterprises;

PC 4: Elaboration of reports and financial statements at the level of enterprises and financial groups; drawing up projects, budgets, forecasts and other complex professional approaches based on concepts, theories and economic methods assimilated in the public and private domains;

PC 5. Advanced use of knowledge in the field of investment and taxation for the design, development and implementation of strategies, policies, procedures, financial-accounting management systems in public and private entities.

Learning outcomes:

- Creating and development of complex financial decision tools based on modern theories of financial management and evaluation;
- Applying methods and techniques of analysis, financial forecasting for a proper diagnosis of the company for the purpose of evaluation;
- Integrating of coherent methods and procedures in the direction of evaluating the elements of the enterprise property complex;
- Applying the income-based approach for the purpose of business valuation;
- Evaluating of enterprise using a cost-based approach;
- Applying a comparative approach for business valuation;
- Integrating of internal and external information for a comprehensive business valuation;
- Creating and implementation of financial decisions to maximize the market value of the enterprise.

3. Syllabus of the course

Explanation: Please provide a detailed syllabus of the course (broken down in weeks) – maximum 2 pages

| |
|---|
| Title of the course: Business valuation |
| Semester: II |
| Number of ECTS credits: 7 |
| Language of instruction: Romanian/Russian/ English |
| Type of course: optional |
| Teaching methodology: A. Methods of communication: - Oral communication methods: Expositive (affirmative) and interrogatory (conversational, dialog); - communication methods based on internal language: personal reflection; - written communication methods: reading; B. Methods of Exploring Reality: a) direct - direct exploration: systematic and independent observation; b) Middle-indirect exploration: demonstration, modeling; C. Methods based on action (operational or practical): - methods based on real / genuine action: exercise, case study, project or theme research-action, practical work; simulation / fiction based methods: gaming, drama, learning through dramatization, learning on simulators; - scheduled training. <ul style="list-style-type: none"> ➤ Interactive-creative learning ➤ Brainstorming ➤ MoodleUSM.md (http://moodle.usm.md/moodle/) ➤ Blended learning, ➤ E-learning, |
| Learning outcomes: <ul style="list-style-type: none"> • Creating and development of complex financial decision tools based on modern theories of financial management and evaluation; • Applying methods and techniques of analysis, financial forecasting for a proper diagnosis of the company for the purpose of evaluation; • Integrating of coherent methods and procedures in the direction of evaluating the elements of the enterprise property complex; • Applying the income-based approach for the purpose of business valuation; • Evaluating of enterprise using a cost-based approach; • Applying a comparative approach for business valuation; • Integrating of internal and external information for a comprehensive business valuation; • Creating and implementation of financial decisions to maximize the market value of the enterprise. |
| Brief summary of course contents: The discipline " Business valuation" is a large and complex field of activity that organically |

combines all the knowledge acquired by students in other disciplines. The purpose of the given discipline is to familiarize the students with the complexity of the evaluation activity in its integrity, as well as to form the theoretical, methodical and practical approaches of appreciating the value of a business. The objectives of the discipline consist in the training of skills, the skills of applying the methods of business evaluation, depending on the purpose of the evaluation and the type of the determined value.

Main references and reading:

1. Răman, Analytical Finance: Volume I-II: The Mathematics of Equity Derivatives, Markets, Risk and Valuation, Palgrave Macmillan, London, 2017, ISBN 978-3-319-34026-5, 492 p.
2. Copeland Tom, Roller Tim and Murrin Jack. Valuation: measuring and managing the value of companies. // McKinsey & Company, Inc, JOHN WILEY & SONS, INC. 2019. 576 p.
3. Mulic Andrei, Loginiv Pavel «Application of the model of effective property value management to optimize the financial management of the enterprise» Collection of scientific papers, International Scientific Conference «Economic-financial and social aspects of the economy of the Republic of Moldova in the context of systemic transformations and integration in the European space March 26-27, 2010 Chisinau p 371-378 USM ISBN 978-9975-71-084-8 15 p.
4. Albu S., Albu I - Evaluarea patrimoniului. Chișinău, note de curs, 2009. 234 p.
5. Оценка бизнеса, под ред. А.Г.Грязновой, М.А.Федотовой. «Финансы и статистика», Москва, 2009, ISBN: 978-5-279-02586-2, 736 с.

Form of assessment:

Current evaluation will be performed through: 2 written tests, assessment as a result of seminars attending

Elaboration and submission of the product of individual work (individual or group project/ solution of tasks within the framework of the project) ;

Final assessment – written exam, which includes 2 subjects from the course studied. Each subject of the test includes tasks to: a) knowledge; b) application; c) integration.

The overall score will be determined as a weighted average in the following way:

Current evaluation, including the product of individual work – 60%; Final evaluation – 40%

Teacher(s) of the course: Mulic Andrei, associate professor

ADMINISTRATION OF THE DISCIPLINE

| Code of discipline of the study plan | Title of the course | Responsible for discipline | Semester | Total hours | | | | Assessment | Number of ECTS credits | |
|--------------------------------------|---------------------|----------------------------|----------|-------------|-----------|----|---|------------|------------------------|----|
| | | | | Total | inclusive | | | | | |
| | | | | | C | S | L | | | IW |
| S.02.A.09 | Business Valuation | Mulic A. | 2 | 210 | 30 | 30 | | 150 | ex. | 7 |

ORIENTAL TIMETABLE AND ORIENTAL DISTRIBUTION OF HOURS

| Nr | Content units | Number of hours per week | | |
|----|---|--------------------------|----------|-----------------|
| | | Lecture | Seminars | Individual Work |
| 1. | Business Valuation - introductory notions | 4 | 4 | 10 |
| 2. | The evaluation process of the company | 4 | 4 | 20 |
| 3. | Diagnostic of the company | 4 | 4 | 20 |
| 4. | Economic and financial diagnostics | 2 | 2 | 20 |
| 5. | Evaluation methods: cost approach | 4 | 4 | 20 |

| | | | | |
|--------------|---|-----------|-----------|------------|
| 6. | Valuation methods: income approach | 4 | 4 | 20 |
| 7. | Evaluation methods: comparative approach | 4 | 4 | 20 |
| 8. | Reconciliation of results and evaluation report | 4 | 4 | 20 |
| Total | | 30 | 30 | 150 |

4. Teaching methodology of the course

Explanation: Please explain the teaching methodology and pedagogical approaches of the course – maximum ½ page

In the teaching of the discipline are mainly used interactive methods: problem-solving, case study, heuristic methods by which the student is stimulated to find solutions through the outcome of his own learning activity, interactive-creative learning, brainstorming, blended learning, E-learning MoodleUSM.md (<http://moodle.usm.md/moodle/>), but also traditional methods like: description, explanation of economic phenomena and processes, graphic representations, comparison,

The forms of organizing the training at discipline are made up of lectures, seminars, guiding the individual activity, extra-curricular activity of financial education. In the lectures are taught the basic concepts of the themes of the discipline, the principles of performing business valuation in specialized financial institutions, the functions, methods and tools used in the management of the financial processes, etc. The purpose of the seminars is to examine the most complicated concepts, to solve problems related to the topics studied, to discuss case studies. In the course of the seminar, students are tested on the students' level of learning, the presentation of the individual work (case study).

The case study represents a method of directly confronting the participants with a real, authentic situation, taken as a typical example, representative for a set of situations and problematic events. The goals of this method, heuristic and applicative, are:

- ♣ achieving the contact of the participants with the complex, authentic realities of a given field, in order to familiarize them with the possible aspects and to develop their decisional, operative, optimal capacities and abilities to solve the possible problems;
- ♣ checking the degree of operationally of the acquired knowledge, skills and abilities, behaviours, in limit situations;
- ♣ Systematization and consolidation of knowledge, self-evaluation by each participant

In part, the degree of their applicability in the created situations;

- ♣ educating the personality, the attitudes towards the other participants and towards the respective case, the maturity treatment of the situations;
- ♣ Exercising organizational, leadership, evaluation and decision-making skills, as in a real situation.

5. Labour market relevance of the course

Explanation: Please explain the labour market relevance of the course (linked to findings of WP1) – maximum ½ page

The importance of the course "Business valuation" is dictated by the need to train future economists with a new economic thinking, the skills of applying the valuation methods in the market conditions and the free entrepreneurship activities.

Based on the analysis results from WP 1 (p. 11, 22, 25 Figure 2, 4, 6, Annex 1B, Figure 16-18) the most important FINANCE - specific skills and competencies of current employees - Level of the MA graduates is: Analyzing Data, Business Analytics and Business Valuation; Knowledge of international standards. Features of this specialty consist in the need for students to develop knowledge and skills in the field of Business Valuation.

Evaluation as a professional activity should meet the current needs of economic conditions, as well as take into account both regional and industry specificities.

The study of this discipline allows students to acquire the necessary knowledge about evaluation activity, which is an important component of financial services in a modern market economy. This discipline provides the student with a theoretical and practical basis for the evaluation process in the Republic of Moldova, thus forming the student's ability to determine the value of any element of the enterprise's property. The assessment is closely related to disciplines such as accounting, taxation and financial analysis. Therefore an adequate assessment is not possible without knowledge in these adjacent areas.

Discipline "Business valuation", will create necessary competences for following occupational posts (according to the Classification of Occupations in Moldova): 1120 Directors-General, Executive Directors and Assignees, 1211 Financial heads, 1213 Heads in the field of economic and planning policies, 1346 Heads of units providing financial and insurance services, 2412 Financial and investment specialists and consultants, 4312 Officials in the field of statistics, finance and insurance. More than that, the internalization of economic relations requires economic entities to be more competitive on international markets, that is why it is important to adapt the teaching process to new international trends in Business valuation. Developing course units (modules) to course "Business valuation" in partnership with labor market representatives, analysis of real case studies offered by companies and recommending solutions to some problems in practice national companies.

6. Assessment and grading

Explanation: Please explain the form of assessment of the course – maximum ½ page

In order to evaluate the learning outcomes within the discipline, it is done:

1. Current evaluation - is conducted throughout the semester during courses, seminars, consultations. They are also rated on a scale of 1 to 10 compulsory semesters, which take place in pre-established periods in the annual academic calendar. The weight of the current assessment is 60% of the final grade.

2. Final assessment - is done through the written exam, using the institutional test, consisting of 2 subjects of tasks on 3 levels with different degree of complexity (knowledge, applied, integration). The weight of the mark on the exam is 40% of the final grade in the discipline.

3. Evaluation of the product of individual work - is done outside direct contact hours: at counselling hours or in the sessions of the student's academic seminar.

a) The final grade in the discipline is calculated according to the MSU Academic Performance Evaluation Regulation: Semester grade (60%) + Examination note (40%)

- The semester assessment is determined based on the components that make up the current evaluation:

$$\frac{T_1 + T_2 + \frac{MEC + LI}{2}}{3}$$

Semester assessment =

T1 - mandatory Test 1.

T2 - - mandatory Test 2.

MEC - the average of the current assessment, is calculated as a simple arithmetic mean of grades accumulated in seminars and courses.

LI -not granted for the final product presented for the individual work carried out.

- Final exam (final assessment) - 40%;

b) Minimum requirements for promotion

└ Obtaining the minimum promotion mark for the discipline (semester note);

└ Obtaining the minimum mark for promotion at the course exam;

└ elaboration, presentation and support of individual work;

7. References

Explanation: Please provide the main references and recommended reading for the course – maximum 1 page

1. International Valuation Standards: Businesses and Business Interests (IVS 200), Intangible Assets (IVS 210), Plant and Equipment (IVS 300), Real Property Interests (IVS 400), Development Property (IVS 410), Financial Instruments (IVS 500)
2. Brigham, Joel F. Houston, Colin Drury «Managerial Finance 2nd Edition» IBMMS Regular and Fast-Track Programmes Eugen F. United Kindom Ashford Colour Press 2018, ISBN 978-1-4737-5666-3
3. Corelli, Analytical Corporate Finance (Springer Texts in Business and Economics), 2nd ed. 2018, Springer, ISBN 978-3-319-95761-6
4. David Hillier, Iain Clacher, Stephen Ross, Randolph Westerfield, Bradford Jordan «Fundamentals of corporate finance: Third European Edition» McGraw-Hill Education London, 2017, ISBN 978-1-259-25333-1
5. Richard A. Brealey, Stewart C. Myers, Franklin Allen, «Principles of corporate finance 12th edition», McGraw-Hill Education London, 2017, ISBN-13 9780077178239
6. Răman, Analytical Finance: Volume I-II: The Mathematics of Equity Derivatives, Markets, Risk and Valuation, Palgrave Macmillan, London, 2017, ISBN 978-3-319-34026-5, 492 p.
7. Albu S., Albu I. Evaluarea patrimoniului. Chișinău, 2009.
8. Mulic Andrei, Loginiv Pavel «Application of the model of effective property value management to optimize the financial management of the enterprise» Collection of scientific papers, International Scientific Conference «Economic-financial and social aspects of the economy of the Republic of Moldova in the context of systemic transformations and integration in the European space March 26-27, 2010 Chisinau p. 371-378, USM ISBN 978-9975-71-084-8
9. Оценка бизнеса, под ред. А.Г.Грязновой, М.А.Федотовой. «Финансы и статистика», Москва, 2009, ISBN: 978-5-279-02586-2, 736 с.
10. Тэпман Л.Н., Оценка недвижимости, ЮНИТИ, Москва, 2002
11. Sorin V. Stan, Evaluarea întreprinderilor. Metode și uzanțe., Editura Teora, București, 1999
12. Legea R.M. cu privire la activitatea de evaluare, nr. 989-XV din 18.04.2002. M.O. al R.M. nr.102 din 16.07.2002.
13. Regulamentul cu privire la evaluarea obiectelor de proprietate intelectuală, Hotărârea Guvernului R.M. nr.783 cu privire la evaluarea obiectelor de proprietate intelectuală, AGEPI 2003
14. Regulament provizoriu privind evaluarea bunurilor imobile, Hotărârea Guvernului Republicii Moldova nr. 958 din 4 august 2003, M.O. al R.M. nr. 177-181 din 15.08.03.

8. Course assignments

Explanation: Please provide two assignments for the course (e.g. group work, project, essay, case study, homework).

8.1 Assignment 1

STATE UNIVERSITY OF MOLDOVA
Finance and Banking Department

Approved _____
Department
head

Dr.conf.univ Ștefaniuc Olga

Test on discipline "Business valuation" Year I Master

Topic I Valuation methods: comparative approach

I. Level of knowledge 3 p.

1.1. Define the concept of valuation of enterprises using comparative sales approach.

II. At the application level 5 p.

1.2. Explain the principles and features used in the process of business valuation by a comparative approach.

III. At the level of integration 7 p.

1.3. «AgroProfi» LLC decide to Evaluate a three-story office building (by the method of percentage and absolute monetary adjustment) for an office with an underground garage. If there is a building similar but without an underground garage sold at a price of 230,000 dollars. There is also data on the following objects analogues:

| Building | The presence of an underground garage | Physical characteristics and purpose of the object | Price |
|----------|---------------------------------------|--|---------|
| 1 | + | Three-story office building | 210 000 |
| 2 | - | Also | 240 000 |
| 3 | + | Two-storey building for a shop | 280000 |
| 4 | - | Three-story production room | 310000 |

Topic II. Business Valuation - introductory notions

I. Level of knowledge**3 p.**

1.1. Define the concept of types of value, the need and objectives of the valuation of enterprises.

II. At the application level**5 p.**

1.2. Explain the specifics of business and enterprise as an object of evaluation.

III. At the level of integration**7 p.**

1.3. Determine the value of the «Tds&co» LLC, consisting of: a production building, measuring 40m x 20m x 7m - renting out for 4 years brings the company 120 lei per month for each sq.m., maintenance costs are 22%, the capitalization rate is 13%; Rent will increase by 8% annually. The update rate is 16%. The cost of one cubic meter of the production building is 1200 lei.

| Structural elements | specific gravity of elements,% | amortization of elements,% | amortization of the building by elements% |
|------------------------|--------------------------------|----------------------------|---|
| 1. The foundation | 7 | 25 | |
| 2. Walls | 33 | 40 | |
| 3. Roof | 15 | 20 | |
| 4. Exterior finish | 15 | 45 | |
| 5. Interior decoration | 13 | 25 | |
| 6. Communications | 10 | 18 | |
| 7. Other elements | 7 | 19 | |
| Total | 100 | - | |

The scale of assessment

| Points | 6 – 8 | 9 – 11 | 12 – 18 | 19 – 25 | 26 – 28 | 29 – 30 |
|--------|-------|--------|---------|---------|---------|---------|
| Note | 5 | 6 | 7 | 8 | 9 | 10 |

Responsible Professor: Dr. associate prof. Mulic A. _____ \ _____ 2020

8.2 Assignment 2

Introduction of the case / problem:

This case study will be analyzed at the seminar.

This case study is interdisciplinary and will be used in the development of individual works in two disciplines.

Refers to content units:

1. Corporate Finance
2. Business valuation

The course notes, available online at www.moodle.usm, will be consulted.

CASE STUDY Part II Business valuation

Determine the value of the «Franzeluta» JSC, having the following data:

- industrial building = $50 * 40 * 5$ m
- sales of goods A = 10000 pcs
- the volume of sales of goods B = 20,000 pcs
- the cost of a unit of goods A = 20 lei
- the cost of a unit of goods B = 16 lei
- the cost of production of goods A = 63%
- the cost of production of goods B = 45%
- market value of one m² of industrial building = 990 lei

Forecasts:

| Indicators | Year | | |
|--|------|------|------|
| | 2020 | 2021 | 2022 |
| 1. The increase in sales of goods A, in% | 10 | 10 | 12 |
| 2. The increase in sales of goods B, in% | 5 | 10 | 15 |
| 3. amortization, in lei | 5000 | 6000 | 6500 |

The value of the company's net assets in 2019 is 11,000,000 lei, the profitability of the company is 19%.

Building data for valuation of amortization

| Structural elements | specific gravity of elements,% | amortization of elements,% | amortization of the building by elements% |
|------------------------|--------------------------------|----------------------------|---|
| 1. The foundation | 15 | 10 | 1,5 |
| 2. Walls | 25 | 15 | 3,75 |
| 3. Roof | 13 | 25 | 3,25 |
| 4. Exterior finish | 18 | 20 | 3,6 |
| 5. Interior decoration | 6 | 26 | 1,56 |
| 6. Communications | 16 | 11 | 1,76 |
| 7. Other elements | 7 | 15 | 0,45 |
| Total | 100 | ----- | 15,87 |

Task for the students

1. Making the diagnosis of the company for the purpose of evaluation.
2. Evaluation of the enterprise by the method of income.
3. Evaluation of the enterprise by the method of expenses.
4. Evaluation of the enterprise by comparative method.
5. Reconciling the resulting values.
6. Preparation of the evaluation report of the company.

At the end of the project (case study), the group of students develop a presentation and show it to a financial manager, director of an investment fund or a partner of a Joint Stock Company "Franzeluta" from Republic of Moldova.

Evaluation is carried out on the basis of (whole) assessment for each of the six parts mentioned, as well as report correctness indicators (Introduction - Main conclusions (s), Romanian / English / Russian, good argumentation, clarity of the material, contribution of each student in the overall task) and, finally, an indicator of originality. The final mark is the average of these five numbers, rounded to one decimal place. There may be deviations from the per student.

Table 1. Requirements regarding the structure, implementation strategies and terms of presentation of the product of the individual work.

| CASE STUDY | | |
|---|--|---|
| Structure | Implementation strategies | Deadline for submission |
| <ol style="list-style-type: none"> 1. The title sheet; 2. Description of the case and the tasks formulated (by the subject holder); 3. The methodology applied, which includes: <ol style="list-style-type: none"> a. information base (legislative and normative framework, methodological, monographic sources, scientific papers, statistical databases, etc.) b. the research methods used (quantitative and qualitative); 4. Solving the case; 5. Conclusions and / or decisions taken; 6. Annexes (if necessary) | <ol style="list-style-type: none"> 1. Documentation of the case; 2. Analysis and processing of information 3. Finding and scoring solutions; 4. Analysis and comparison of solutions (variants); 5. Formulate and present optimal solutions and / or decisions; 6. Perfecting the product according to the technical requirements submitted. | At least 2 weeks until the end of the semester. |

Annex: Presentation slides

Explanation: Please provide presentation slides for your course (this can be done in a separate document, e.g. Power Point (Minimum: 25 slides))

