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Course Package “Corporate Finance”

Work Package	WP3: Development of Course Materials for the Reformed MA Programmes, Deliverable 3.1
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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)	Corporate Finance
Name of the teacher	Maria COJOCARU
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	The 1st
Semester of the course in the curriculum	The 1st semester
Language of instruction of the course	Romanian/ Russian/English
Number of ECTS credits	8/240 hours

2. Learning outcomes of the course

Explanation: Please specify the learning outcomes of the course.

The course "Corporate Finance" is focused on the formation of systemic knowledge in the field of corporate finance by disclosing the relationship of theory and practice in solving specific problems of Corporate finance. The course is aimed at deepening the previously acquired knowledge and skills in the field of the functioning of company finances regarding the practice of their use for preparing financial decisions in joint-stock companies.

The course content consists of practical aspects of the development and adoption of management decisions, taking into account the specifics of the functioning of finance for corporate forms of business organization.

As a result of studying the course, students should master the tools necessary for the analysis, planning and management of the financial resources of the company in order to effectively manage its cash flows, investment activities and market value. Particular attention is paid to the formation of effective working skills with the financial statements of the company and the adaptation of modern concepts of corporate finance theory to the features of their application in Moldovan companies.

Learning outcomes:

- Applying in practice the basic concepts and principles of corporate finance to understand and make the important financial decisions and solve practical problems.
- analyze and interpret financial and accounting information and other information contained in the statements of corporations of various ownership forms and use the data obtained to make current, medium and long-term management decisions;
- application of financial theory and techniques to evaluate a firm's investment and financing decisions;
- evaluate critically corporate financial management practices with the aim of proposing and implementing improvements;
- assess the value and structure of the company's capital and possible directions for its optimization;
- develop a financial management strategy for the corporation based on modern methods and advanced scientific achievements in the field of finance;
- analyse the relationship between strategic decision making and corporate financing decisions;
- recognise and manage professional issues in corporate financial management;
- work collaboratively with others set goals, and plan and implement solutions to diverse problems in the corporate finance domain;
- autonomous and team approach the complex financial problems that arise in the management of a corporation.

3. Syllabus of the course

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

Prerequisites:

Fundamentals of Financial Management (time value of money; valuation of financial assets; risk-return trade-off; cost of capital) and preferably some Financial Accounting and Managerial Accounting. In particular, it is expected that students will be comfortable with the following topics from Managerial Finance: time value of money, risk-return trade-off, valuation of bonds and stocks.

Contact Information and Office Hours:

Associate Professor: **Maria Cojocaru:**

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- Office hours: Mondays 10:00 am – 12:00 am or by appointment.
- Office: 319/Central Building

Teaching Assistant: **Elena Rusu** (rusu.elena@gmail.com; office hours by appointment).

Schedule and Classroom:

- Lectures: Wednesdays 5:30 - 8:30 pm (305/ Central Building)
- Seminars: Mondays 5:30 - 8:30 pm (309/ Central Building)

Course Structure

TOPIC 1. Introduction to Corporate Finance. (Week 1)

Forms of organization of corporate structures and their classification (groups of companies, holding companies, etc.). Corporate Finance Principles. Corporate finance: concept, goals and objectives. The financial environment of the corporation.

Financial market, financial institutions, financial instruments and corporation. Important aspects that differentiate the financial market towards the capital market. The contrast between the financial markets of developing countries towards the developed ones and how this affects financial decisions. What are the main reasons the national organizations prefer to register in other jurisdictions?

The principles of building an effective corporate finance management system. Functions and responsibilities of the financial director.

TOPIC 2. Fundamental concepts and modern theories of corporate finance. (Weeks 2 - 3)

Basic Concepts of Corporate Finance. Stakeholders of the company and harmonization of their interests. Management actions to maximize shareholder welfare. The organizational culture of the company. Behavioral theories. Behavioral theories. THE Behavioural Model of Cyert and March. Williamson's model. Jensen and Meckling's theory.

The theory of efficient markets. Information asymmetry. Signal theory. Agent theory. The problem of maximizing the price.

TOPIC 3. Models and algorithms for making corporate financial decisions. (Weeks 4 - 5)

Financial information: concept, features, institutions. Corporate financial disclosure models and standards. GAAP (Generally Accepted Accounting Principles), IFRS (International Financial Reporting Standards), NAS (National Accounting Standards).

Information structure reporting. Interrelation of indicators of the main reporting forms. Current trends in the dissemination of corporate financial information. Features of the financial approach to the analysis of the corporation. The concept of financial strategy and financial policy.

TOPIC 4. Reading Financial Statement. Financial Analysis. (Weeks 6 - 7)

Analysis of the financial position based on the balance sheet. Net current assets. The financial cycle versus the operating cycle. Working capital management policies. Stock management. Debt management. Loan and debt management in foreign currency.

Analysis of financial performance based on the Profit and Loss Statement. Cash, cash flow and net profit of the company. The system of financial rates of the company. Indicators for the evaluation of the company. Available cash flow: FCFF (Free Cash Flow to Firm), FCFE (Free Cash Flow to Equity), FCFD (Free Cash Flow to Debt).

Available cash flow elements. Sustainable growth - the basic objective of financial management. Value rates. EVA (Economic Value Added), MVA (Market Value Added), SVA (Shareholder Value Added), TSR (Total Shareholder's Return), CFROI (Cash Flow Return on Investment), CVA (Cash Value Added) or RCF (Residual Cash Flow) indicators - basic criteria for evaluating financial decisions. The advantages of using the EVA indicator in investment decisions.

TOPIC 5. Financial Budgeting and Forecasting. Scenario and Sensitivity Analysis. (Weeks 8 - 9)

Sales forecasting: methods and techniques. Sales forecasting through simulation technique. Planning the necessary financing. Specific correlations of capital requirement with turnover. Sustainable growth. Self-financing growth. Developing the debt policy. Treasury budget. Forecasting of receipts and payments. Calculation and coverage of cash balances. Models of cash balance management. The Baumol model. The Miller-Orr model. Cash balance optimization: regression models. Techniques for forecasting financial statements. Estimating the growth rate of earnings. Budget control. Scenario and Sensitivity Analysis.

TOPIC 6. Selection and optimization of corporate finance structure. (Weeks 10-11)

Sources of financing of a company. Principles of attracting additional capital. Public financing versus private financing. Financial leverage. The cost of different sources of capital. Issue costs. Marginal cost of capital. Methods for determining the cost of equity. The Gordon-Shapiro model. The Bates model. The CAPM model. Determining the cost of self-financing. Methods of determining the cost of borrowed capital. Calculation of the weighted average cost of capital (WACC) and its importance for the company's financing policy and financial decision making. Leasing financing. Financing decision and cost of capital in financial theory. The classical model of the cost of capital (Modigliani-Miller model: in the absence of taxation and in conditions of taxation).

Optimal structure and the objective structure of capital. Leveraging and evaluating the decision regarding the capital structure. The influence of the capital structure on the financial risk and the price of the shares. Capital structure and agent theory. Capital structure and information asymmetry. Paths for optimizing the structure of the capital. Difficulties in determining the optimal capital structure.

TOPIC 7. Long-term investment decisions. Analysis and evaluation of the efficiency of investment projects. (Weeks 12-13)

The importance of investment decisions to ensure the growth of the company. The financial elements of an investment. Adjusting the discount rate according to risk. Criteria for evaluating independent investment projects in a certain environment. Net Present Value (NPV); Profitability Index (PI); Accounting Rate of Return (ARR); Internal Rate of Return (IRR); Modified Internal Rate of Return (MIRR); Terminal Value (TV). Analysis of investment projects in an uncertain environment. Sensitivity analysis. The decision tree. Scenario technique. Monte Carlo technique. Evaluation of investment projects through the mechanism of options.

Selection between several investment projects with different schemes for generating cash flows. Investment portfolio. The replacement decision and the divestiture decision. Control over project implementation. Sources of financing of investment projects.

TOPIC 8. The financial architecture of the corporation and the problems of its restructuring. (Weeks 14-15)

Financial crisis management of companies. The essence and classification of the financial difficulty of the entity. Objectives and stages of the crisis management process at the microeconomic level. Fundamental diagnosis of the financial crisis of the entity. Financial management of the stabilization, reorganization and liquidation processes of the economic entity.

Elaboration of the liquidation / financial sanitation plan of the entity. The essence and role of mergers in increasing the value of the company. Target firm evaluation. Horizontal merger. Vertical merger. Congeneric merger. Friendly merger. Hostil takeover. The poison pill. The white knight. LBO acquisition (on debt) and related transactions. Divestitures. Spin-off and carve-out. Breakup value. Control with fractional ownership.

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, discussion, brainstorming, role-play, E-learning MoodleUSM.md (<http://moodle.usm.md/moodle/>), but also traditional methods like: lecture method to introduce a subject, present basic material, to illustrate application of rules, principles, or concepts, graphic representations etc.

The forms of organizing the training at course are made up of lectures, seminars, guiding the individual activity and group work, extra-curricular activity of financial education.

In the lectures are taught the basic concepts of the themes of the discipline, 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. During seminar, students are tested on the level of learning, the presentation of the individual or group work.

Individual work involves preparing for the seminars in accordance with the objectives set in the syllabus, problem-solving or case study.

If necessary, the student has the possibility to get a personal teacher's consultation.

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

Based on the analysis results from WP 1 (Annex 1B, Figure 16-18) the most important FINANCE - specific skills and competencies of current employees - Level of the MA graduates is: Budgeting and financial planning, IT and math skills. Features of this specialty consist in the need for students to develop knowledge and skills in the field of financial management. The peculiarities of the orientation of these competencies allow uniting financial and accounting activities and creating universal specialists for the national economy, which certainly will provide them with undoubted advantages in the job placement.

This course aims at training competencies for CFOs at company level. The purpose of the CFO is to maximize the value of the companies through three types of decisions: in which projects to invest, how to finance the respective investment and how to manage the cash flows of the company. According to the Classification of Occupations in Moldova, discipline Financial and Actuarial Calculations at the National and International Level, will create the specialists for following occupational posts: 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 and other.

6. Assessment and grading

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

Means of assessment by discipline: oral survey; control testing; individual and team solution of tasks set by teachers, final control of knowledge in the form of final work.

General mark is determined as a weighted average as follows:

- Current evaluation including individual work product – 60%;
- Final exam (final assessment) - 40%;

The current assessment will be done by two intermediate tests and a case study

Final evaluation - written exam, which includes two of the eight themes studied.

Requirements to pass the course:

1. to obtain the minimum promotion mark (E) for participating during the seminars;
2. to obtain the minimum promotion mark (E) for final case study.
3. to obtain the minimum promotion mark (E) for final exam.

Students will be expected to pass all three components to pass the course overall.

7. References

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

Textbook

Cojocaru Maria, Șestacovscaia A., Mihalachi R. Fundamentals of Financial Management. Note de curs. Ch.: CEP USM., 2017, 174 p.

Brealey R., Myers S., Marcus A. Fundamentals of Corporate Finance, The McGraw Hill Companies, 2001

Halpern Paul, J. Fred Weston, Eugene F. Brigham, Canadian Managerial Finance; ISBN-13: 978-0039219932; ISBN-10: 0039219933

Ross, S., Westerfield R., Jaffe J., Corporate Finance, McGraw Hill, 2005.

Pike, Richard (Richard H.) Corporate finance and investment: decisions & strategies/Richard Pike and Bill Neale. — 6th ed. p. cm. ISBN 978-0-273-71550-4

Ковалев В.В. Введение в финансовый менеджмент,- М. Финансы и статистика, 2007.

Articles:

Cojocaru M. *Mergers and acquisitions - mechanism of concentration of capital and economic growth* In: Materials of the National Scientific Conference with International Participation

"Integration through Research and Innovation", Section "Legal and Economic Sciences", 10 - 11 noiembrie 2015. CEP MSU. Chişinău, 2015, pg. 256-257.

Cojocaru M., Mammadova U. *Theoretical aspects of the financing of mergers and acquisitions transactions*. In: Materials of the National Scientific Conference with International Participation "Integration through Research and Innovation", 9 – 10 noiembrie 2017, MSU. – Chişinău, pg. 341-344. Cojocaru M., Hromei Anca-Simona. Mergers and Acquisitions - a Means of Improving Economic Performance. In: Materials of the International Scientific Conference "Innovation, Performance and Competitiveness in the Financial Sector", 30 -31 octombrie 2015. CEP USM. Chisinau, 2015, pg. 217-226.

8. Course assignments

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

8.1 Assignment 1

The current assessment consists of:

- two intermediate tests (Multiple-Choice Test) (each test have 20% in the General mark);
- a case study elaborated in groups of 4 students, presented one week before the exam (20% in the General mark).

Assessment of the case study:

Criteria Grade Scale

A	B	C	D	E
Reasonable and original application of theoretical ideas to the analysis of the current situation, active participation in the development of a collective solution	Adequate application of theoretical ideas to the analysis of the current situation, active participation in the development of a collective solution	Satisfactory application of theoretical ideas to the analysis of the current situation, partial participation in the development of a collective solution	Weak application of theoretical ideas to the analysis of the current situation, delegation of a significant part of the work to other team members	Weak application of theoretical ideas to the analysis of the current situation, unwillingness to work in a team

8.2 Assignment 2

Final assessment (Exam)

Final evaluation - written exam, which includes 40 Multiple Choice questions (MCQ) for which 1 point is awarded and 2 Open questions (10 and 20 points).

Minimum requirements for pass the exam:

Obtaining the minimum promotion semester mark 5,0 (E), which is formed as a weighted average of the evaluation for: two intermediate tests, case study assessment and evaluation during the seminars.

Final Assessment (Exam) Test

MOLDOVA STATE UNIVERSITY

Course: **Corporate Finance**

Master Program: **Financial Management and Business Accounting**

Year of study: **2019-2020**

Student (Name, Surname) _____

Group _____

Part I. Multiple Choice

1. The factors that influence the short-term financial balance of the company are:

- A. Clients and duration of receivables;
- B. Providers and duration of payment obligations;
- C. Stocks and their storage range
- D. Fixed assets and their duration of fixed assets
- E. Financial liabilities and their term of payment.

2. By applying the Baumol model for managing cash balances, determine the correct option, if an opportunity cost increase occurs:

- A. Increases the optimal balance and the average duration between two reconstructions of optimal balance;
- B. The optimal balance and the average balance decrease, but the number of reconstitutions of the optimal balance increases;
- C. The optimal balance decreases and, implicitly, the average duration between two reconstructions of optimal balance increases;
- D. The optimal balance increases, but the average duration between two reconstitutions of the optimal balance decreases;
- E. The optimal balance increases and the number of optimal balance reconstructions increases.

. . .

39. The dividend per share that a new company will have to pay in the year immediately set up in the event of applying the Gordon-Shapiro mode (the current stock exchange rate is 2000 MDL, the rate of return demanded by the shareholders is 2%, an increase is forecast of dividends by 1% per year) and in the case of efficient markets, will constitute:

- A. 12 MDL
- B. 20 MDL
- C. 22 MDL.
- D. 25 MDL.
- C. ____ MDL.

40. A football player concludes the contract, according to which he will receive 10 million Euros for a period of 3 years. The payments will be distributed as follows: 1 million euros at the time of conclusion of the contract, 2 million Euro - at the end of the first year, 3 million Euros - at the end of the second year and 4 million Euros - at the end of the third year. The present value of these 10 million Euros is:

- A. 10.5 mil. Euro
- B. 9.25 mil. Euro
- C. 8.224 mil. Euro
- D. 9.544 mil. Euro
- C _____ mil. Euro

Part II. Open questions

1. Selection and optimization of corporate finance structure (10 points)

The Holding company owns shares of two production firms: "A" and "B". The capital structure of both companies is the same: borrowed capital - 30%, the rest - simple shares. The average interest rate on the financial market is 5%, the income tax rate - 12%. The parent company wants to determine a minimum level of profitability for each of these companies, depending on the degree of risk. To this end, two companies were established - analogue companies, whose $\beta_A = 0.9$ and $\beta_B = 1.3$. Both analogue companies do not have a financial lever, so they do not use long-term borrowed financing sources. The risk-free rate of return constitutes 8%, the average rate of return on the market - 15%.

Decide what should be the minimum level of return on assets of each company.

2. Reading Financial Statements. Financial Analysis / Value rates. (20 points)

Company "X" is active in the field of wine production. The capital invested at the valuation date constitutes 100 million MDL. Structure of invested capital: 50% equity, 50% borrowed capital. Cost of borrowed capital - 5%, cost of own capital - 15%, NOPAT = 11 million MDL. After calculating the EVA indicator at the present moment, the company manager analyzes the possibility of investing 25 million MDL in the purchase of new equipment. The investment to be financed entirely from bank credit is expected. The estimated return on investment is 6%.

- a) Estimate the return on the initial invested capital ($ROIC_1$) - 2 p.
- b) Calculate EVA until the time of the investment - 2 p.
- c) Calculate the operating profit from the investments made - 2 p.
- d) Estimate return on capital after making investments ($ROIC_2$) - 3 p.
- e) Rate the weighted average cost of capital (wacc) - 3 p.
- f) Decide on making the investment according to the EVA indicator and make the necessary arguments - 8 p.

Points	1 - 5	6 - 10	11 - 20	21 - 30	30 - 40	41 - 50	51 - 57	58 - 64	65-68	69 - 70
Mark	1	2	3	4	5	6	7	8	9	10

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))