

Introduction to Finance

Syllabus

Approved by the Program Academic Council

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Protocol # 3

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1. Course Description

a) Pre-requisites

The following courses are required as prerequisites:

Calculus I, II

Microeconomics I, II

b) Course Type (compulsory, elective, optional)

Elective course

2. Abstract

This course is a first course in finance and will cover the basic topics in corporate finance and investments and give an overview over contemporary financial markets and the most common financial instruments. Core concepts will include the time value of money, opportunity costs, arbitrage pricing, bond valuation, stock valuation, concepts of risk, portfolio theory, asset pricing and market efficiency. Basis statistics need for learning these concepts will be covered as well. These include measurement of arithmetic and geometric means, expected values, historic and expected variance and covariance.

3. Learning Objectives

The main objective of the course is to provide the conceptual background for corporate financial analysis from the point of corporate value creation. The course develops theoretical framework for understanding and analysing major financial problems of modern firm in the market environment.

4. Learning Outcomes

After learning the course, students will:

know:

- necessary basics for evaluating different management decisions and their influence on corporate performance and value;

- how to analyse corporate behaviour in capital markets and the relationship of agent and principal in raising funds, allocating capital, distributing returns.

be able to:

- work with information from a variety of sources, especially data from financial statements and financial data from open access;

- generalise and discuss the results of theoretical and empirical studies and to reveal the possible directions for further research in examined area.

have skills of:

- applying different models to value company's assets and capital;

- justify the efficiency of company's strategic decisions (investment decisions, financing decisions, payout decisions) and make recommendations;

- reveal and analyse factors affecting company value.

5. Course Plan

Part 1. Valuation and Capital Budgeting

Topic 1. Present Value

Topic 2. Stock and Bond Valuation

Topic 3. Capital Budgeting Rules

Topic 4. Uncertainty, Default and Risk

Part 2. Risk and Return

Topic 1. The history of returns and risk on investments

Topic 2. Investor Choice: Risk and Reward

Topic 3. Portfolio Theory

Topic 4. The Capital Asset Pricing Model (CAPM), plus ICAPM and APT

Part 3. Market Efficiency

Topic 1. Market Imperfections

Topic 2. Perfect and Efficient Markets, and Classical and Behavioral Finance

Part 4. Real World Applications

Topic 1. Capital Budgeting: Applications and Pitfalls

Topic 2. From Financial Statements to Economic Cash Flows

Topic 3. Valuations for Comparable and Financial Ratios

Part 5. Capital Structure and Payout Policy

Topic 1. Corporate Claims

Topic 2. Capital Structure in a Perfect Market

Topic 3. Taxes and Capital Structure

Topic 4. More Imperfect-Market Capital Structure

Part 6. Projecting the Future

6. Reading List

a) Required

1. Jonathan Berk, Peter DeMarzo. Corporate Finance. Pearson: international edition, 2007 (or later).

2. Brealey R. A., Principles of corporate finance, McGraw-Hill, 2008

a. Optional

a. Tirole J., The theory of corporate finance, Princeton University Press, 2006

All supplementary materials will be handed out by the professor.

7. Grading System

Please note all lectures and assignments are in English. Assignments/answers written in Russian will receive a grade of zero. The course grade will be based on

1) Attendance 10%

2) 10 homework assignments 15%

3) Mid-term test 35%

4) Final 40%

Grading Scale

Grade in (%) Numeric Grade

95% 10

≥90% 9

≥87.5% 8

≥80% 7

≥75% 6

≥67.5 5

≥57.5 4

≥45 3

≥35 2

≥0 1

Late assignments

Each homework assignment is due at the start of class on the due date. Homework assignments turned in more than 1 minute late and less than 28 hours and 10 minutes late receive a penalty of 20%. Assignments turned in 28 hours and 10 minutes to 48 hours late receive a penalty of 40%. Assignments more than 48 hours late receive a zero.

Absence from class

Attendance, according to HSE/NES rules, is mandatory. In lieu of “excused absences”, there is no penalty for the first 4 absences regardless of reason. After the first 4 absences each absence lowers your grade for attendance by 1/10th (or 1% of your total class grade), regardless of reason.

Do not sign someone else’s name on an attendance sheet: it is an academic offence. The penalty for the first offence is loss of your 10% for attendance and you will be referred to NES/HSE administration. The second offence will be referred to NES/HSE administration and this may result in expulsion from the program.

Missing the mid-term test or final test

Should a student miss either the mid-term or the final test, if NES/HSE administration has verified that the reason is legitimate, the student may take a comprehensive test, covering all material in the course, which can replace EITHER the mid-term OR the final test. This replacement test will be offered approximately one week after the final test date. In rare circumstances, and at the professor’s discretion, the mid-term replacement test may be earlier. The professor will determine exact time of the replacement test after the final test has been administered. EXPECT THAT THE REPLACEMENT IS MORE DIFFICULT.

If a student's grade for the course is failing, the student retains the right to have one additional make-up test to be evaluated by the panel of 3 members per HSE/NES rules (beyond the replacement test mentioned above).

8. Methods of Instruction

The following methods and forms of study are used in the course:

- Lectures
- Self-learning with literature

9. Special Equipment and Software Support:

Special Equipment and Software Support:

The following software programs from local HSE network (by contract) will be used in class:

- Microsoft Windows 7 Professional RUS or
- Microsoft Windows 10 or
- Microsoft Windows 8.1 Professional RUS

The multi-media projector will be required for presentations as well.