

# MASTER PROGRAMS

Fall Semester 2009/2010

#### **COURSE SYLLABUS**

#### INTRODUCTION TO BA: FINANCE

Instructor: Yulia Ilina, Associate Professor jilina@gsom.pu.ru

#### Organization of the course

Program	MIB, MITIM
Year	1-st year
Course status	Elective
Workload	20 hours of classes
Teaching methods	Lectures, exercises, mini-case study, in-class assignments.

### **Course objectives**

- to give an introduction to corporate finance, providing a pre-requisite for International Finance course
- to provide an understanding of the most important concepts and principles of corporate finance at a level that is approachable for a wide audience
- to study essentials of investments, assets valuation, capital structure, specifics of financial markets instruments
- to develop basic skills of valuing assets given forecasts of future cash flows.

#### **Course content**

- **Topic 1**. Introduction to Finance. Overview of Corporate Financing Decisions. Capital Markets and Financial Instruments.
- **Topic 2.** Discounted Cash Flow Analysis and Present Value Concept.
- **Topic 3.** Fundamentals of Stocks Valuation.
- **Topic 4**. Valuing Debt Securities.
- **Topic 5.** Investment Evaluation. Capital Budgeting Decisions.
- **Topic 6**. Risk and Return. Introduction to Portfolio Theory.
- **Topic 7**. Long-term Financial Decisions: Capital Structure and Cost of Capital.

# Plan of classes

Topic 1. Introduction to Finance. Overview of Corporate Financing Decisions. Capital Markets and Financial Instruments.

Topic 2. Discounted cash flow analysis and present value concept.

Class 1.	
Preliminary	Required reading for class:
assignment	— Ross, Westerfield, Jordan. Chapter 1.
September, 4	Key points:
10.45-14.30	— Introduction.
Room 403	— Corporation and financial manager. The goal of financial
	management. Corporate financial decisions.
	— Financial system and financial markets.
	<ul> <li>Money and capital markets.</li> </ul>
	— Types of financial instruments.
	— Financial instruments by issuer.
	<ul> <li>Yields on debt securities. Yield curve.</li> </ul>
	<ul><li>Key interest rates.</li></ul>
	<ul><li>Bonds and stocks.</li></ul>
	—Compounding. Calculating future values.
	— Time value of money. Present value and discounting.
	— Valuation of discounted cash flows.
	—Multiple cash flows.
	<u>Learning outcomes</u> : Students should be able to
	<ul> <li>Define corporate financial decisions, functions of financial</li> </ul>
	manager, financial management goals
	Identify sources of corporate financing, financial markets
	instruments
	<ul> <li>Describe money and capital markets characteristics and instruments</li> </ul>
	<ul> <li>Explain goals of different financial instruments issues by</li> </ul>
	government, banks, corporations
	<ul> <li>Understand the relationship between the yield and maturity of debt securities</li> </ul>
	<ul> <li>Calculate future and present value of money</li> </ul>
	<ul> <li>Explain the time value of money concept</li> </ul>
	<ul> <li>Apply present value concept to discounting of cash flows</li> </ul>
	Assignments for class 2:
	Reading:
	<ul> <li>Ross, Westerfield, Jordan. Chapter 4, 5, 7.</li> </ul>
	— Bodie, Merton. Chapter 4, 9.
	<u> </u>

Topic 2. Discounted cash flow analysis and present value concept (cont.)

### Topic 3. Fundamentals of Stocks Valuation

Class 2.	
September, 8	<u>In-class assignment</u> : Mini-test: Exercises on topics 1, 2.
16.30-19.45	
Room 403	Key points:
	<ul> <li>— Annuities. Future value and present value of annuities.</li> <li>— Perpetual annuities.</li> <li>— Factors that affect stock prices</li> </ul>
	<ul> <li>Stock valuation methods. Discounted dividend model.</li> </ul>
	<ul> <li>Adjusting the dividend discount model.</li> </ul>
	Multiples approach to stocks valuation
	<u>Learning outcomes</u> : Students should be able to
	<ul> <li>Use annuities and perpetuities models in practice of financial calculations</li> </ul>
	<ul> <li>Understand how stock prices depend on future dividends and dividend growth</li> </ul>
	<ul> <li>Be able to compute stock prices using the dividend growth model</li> <li>Explain and use multiples approach to stocks valuation</li> </ul>
	Assignments for class 3:  Reading:
	ů
	—Ross, Westerfield, Jordan. Chapter 6.
	—Bodie, Merton. Chapter 8.
	Problem (to be discussed in class 3): Saving for retirement.
	Mini-case: Stock valuation at Ragan Thermal Systems.
	Ross, Westerfield, Jordan. Chapter 7
	Bodie, Merton. Chapter 8.

Topic 4. Valuing Debt Securities.

Class 3.	
September, 15 13.00-16.15 Room 403	<ul> <li>Key points:</li> <li>Discussing a solution to the problem: Saving for retirement</li> <li>Discussion: mini-case on stock valuation.</li> <li>Bond features, factors that impact bond prices</li> <li>Interest rates and bond valuation. Impact of the discount rate and timing of payments on bond valuation</li> <li>Types of bonds. Pure discount bonds. Coupon bonds.</li> <li>Bond prices and yields. Current yield and yield to maturity.</li> <li>Relationships between coupon rate, required return, and bond price.</li> </ul>
	Learning outcomes: Students should be able to  — Know bond features and how different factors could affect bond prices and yields

-Describe different types of bonds -Understand the term structure of interest rates and the determinants of bond yields —Apply present value concept to valuation of bond prices —Use different models for bond yields calculation

#### Assignments for class 4:

#### Reading:

- Ross, Westerfield, Jordan. Chapter 8.
- Bodie, Merton. Chapter 6.

Mini -case: Financing S&S Air's expansion plans with a bond issue. Ross, Westerfield, Jordan. Chapter 6.

Topic 5. Investment Evaluation. Capital Budgeting Decisions.

ass 4.	In along againments Mini toots Eventing on toning 2, 2, 4
ptember, 22 .00-16.15	<u>In-class assignment</u> : Mini-test: Exercises on topics 2, 3, 4.
om 403	Key points:
Kooiii 403	— Discussion: mini-case on bond issue
	—Investment evaluation: basic steps
	—Forecasting cash flows
	—Net present value. Estimating a project's cash flows.
	—Internal rate of return
	—Payback period
	— Other investment criteria.
	<u>Learning outcomes</u> : Students should be able to
	—Understand how investment decisions are made
	— Explain the nature of project's cash flows
	—Apply net present value criteria to investment project's evaluation
	—Know how to calculate IRR, compare NPV and IRR as investment criteria
	— Calculate Payback Period, Profitability Index, Average Accounting Return
	—Interpret and compare the results of project valuation by different methods
	Assignments for class 5:
	Reading:
	— Ross, Westerfield, Jordan. Chapter 10, 11, 12.
	— Bodie, Merton. Chapter 15.
	— Bodie, Merton. Chapter 13.

Topic 6. Risk and Return. Introduction to Portfolio Theory.

Topic 7. Long-term Financial Decisions: Capital Structure and Cost of Capital.

Class 5.	
September, 29	Key points:
13.00-16.15	<ul> <li>Risk and return</li> </ul>
Room 403	<ul> <li>Risk: systematic and unsystematic</li> </ul>
	<ul> <li>— Diversification and Portfolio Risk</li> </ul>
	<ul> <li>Systematic Risk and Beta</li> </ul>
	— The Security Market Line
	<ul> <li>Capital asset pricing model (CAPM). Determinants of the risk</li> </ul>
	premium on the market portfolio.
	— Financial leverage
	<ul> <li>Capital structure and earnings per share</li> </ul>
	<ul> <li>Capital structure and return on equity</li> </ul>
	<ul> <li>Weighted average cost of capital</li> </ul>
	<u>Learning outcomes</u> : Students should be able to
	—Know how to calculate expected returns
	—Understand the impact of diversification
	—Explain the systematic risk principle
	—Understand how to use risk and return concept in assets valuation
	—Use CAPM for estimating expected return on equity
	<ul> <li>Understand the effect of financial leverage</li> </ul>
	Know how to estimate the cost of debt and equity capital, WACC
	<ul> <li>Apply capital structure and cost of capital concepts to measure cost</li> </ul>
	of equity capital
	. I. AL

### Office hours for individual consultations:

Volkhovsky per.,1/3, room 403 or 221 Friday, September 4 15.00-16.00

Tuesday, September 8 19.45-20.30

Asc. Prof. Yulia Ilina

Tuesday, September 15, September 22 16.30-17.30

Tuesday, September 29 12.30-13.00

Per. Dekabristov, 16, room 419 or 428

Wednesday 15.00-17.00

# Calendar plan of current and final evaluation

Announcement of coursework results	To be announced by September, 30
Final test	October, 1
Announcement of final results	October, 5

# **Evaluation system**

#### **Current evaluation**

Students' progress is monitored during the course by the following types of evaluation procedures:

— In-class assignments: tests

### **Grading system**

Final grade consists of the following elements:

Element	Weight
1. In-class tests	40%
2. Final test	60%
TOTAL	100%

In-class assignments and final test consist of multiple choice questions (30%) and exercises (70%).

## Required textbook

S. A. Ross, R. W. Westerfield, B. D. Jordan. Essentials of Corporate Finance. 6-th ed. McGraw Hill, 2008.

# Other required reading

Bodie Z., Merton R. Finance. - Prentice Hall, 2000.