

## COURSE DESCRIPTION

Course Title	<b>BUSINESS FINANCE I</b>				
Course Code	AFIN101				
Course Type	Compulsory				
Level	BA (Level 1)				
Year / Semester	3 / Spring				
Teacher's Name	Dr Michalis Makrominas				
ECTS	6	Lectures / week	3	Laboratories/week	
Course Purpose	<p>The purpose of the course is to introduce students in the finance field. In this course we also introduce students to an important aspect of finance, the analysis of investment decisions by corporations. We start by defining the important issues analysed in the finance field, the role of the financial markets, the organization of firms and the role of the financial manager.</p> <p>During the course we discuss differences in raising short-term finance versus long-term finance, explain the importance of considering alternative use of money in other investments (opportunity cost) and appraise investment projects using Net Present Value approach. We also learn to decide between mutually exclusive investment alternatives.</p> <p>Students apply the present value approach to alternative business finance problems including bank loans and bond valuation and learn how to consider convertible bond features.</p> <p>Students also learn how to explain the differences between alternative methods for project appraisal (Internal Rate of Return and Payback) and discuss their disadvantages compared to the Net Present Value approach. Finally, one of the goals is that they solve problems with current period budget constraints and formulate problems with multi-period budget constraints as linear programs.</p>				

Learning Outcomes	<ul style="list-style-type: none"> <li>• Define the issues analysed in the finance field, the role of the financial markets, the organization of firms and the role of the financial manager</li> <li>• Compare and explain differences in raising short-term finance versus long-term finance</li> <li>• Describe the concept of the opportunity cost and appraise projects using Net Present Value approach taking into the cost of equity and cost of debt and overall cost of capital. Decide between mutually exclusive alternatives.</li> <li>• Apply the present value approach to alternative business finance problems including bank loans and bond valuation. Consider convertible bond features.</li> <li>• Outline the differences between alternative methods for project appraisal (Internal Rate of Return and Payback) and be in a position to discuss their disadvantages compared to the Net Present Value approach</li> <li>• Solve problems with current period budget constraints and formulate problems with multi-period budget constraints as linear programs</li> </ul>		
Prerequisites	None	Co-requisites	None

## Course Content

### Finance, the role of the financial markets and the financial Manager

- Understand the issues analysed in the finance field
- Understand the different forms of business organizations and their advantages-disadvantages
- Discuss the role of the financial markets including the stock, bond market and banks
- Discuss differences in raising short-term finance versus long-term finance and the role of the money market
- Separate the main functions performed by the financial manager including the financing decision, the investment decision and the dividend decision and their interrelations
- Identify the difference between real and financial assets and tangible and intangible real assets
- List the roles of the financial manager and identify the persons within an organization performing these roles (between the Chief Financial Officer, controller and Treasurer).
- Understand the meaning of corporate governance mechanisms and their role in the performance of firms and investor protection
- Understand the issue of agency problems and identify different types of agency problems existing between claim holders of the firm
- Be able to propose solutions to mitigate agency problems with managerial reward schemes such as share options and performance-linked pay

### The cost of capital:

- Understand the concept of the time value of money and the compounding of interest • Calculate future values
- Understand discounting and the present value
- Understand the concept of the opportunity cost of capital

- Cost of equity, cost of debt and overall cost of capital
- Identify how to obtain sound opportunity costs connected to project risk
- Calculate simple rates of return of one-period problems and use rate of return rule to make an investment decision
- Calculate rates of return of one-period problems with probability scenarios
- Use return approach to calculate a reasonable opportunity cost of capital based on alternative investments with the same risk
- Understand the role of financial markets in allocating current and future consumption and the connection with Net Present Value decisions

Present value, the effect inflation and applications for bank loans and bonds:

- Apply the general Net Present Value approach for project appraisal
- Calculate future values for multi-period problems
- Compare and contrast simple and compound interest calculations
- Calculate future values with simple and compound interest accumulation
- Apply probability analysis to investment projects
- Apply present value short-cuts for special cases of present value calculations
- Apply a combination of present value short-cuts within a single project (when multiple special cases exist within the same project)
- Apply the present value analysis in the presence of inflation: real and nominal rates of interest
- Apply the present value approach for calculating the present value of a bank loan based on future instalments
- Understand the concept of effective interest and its connection with the compounding of interest
- Solve problems obtaining the instalments necessary to match the present value of the loan
- Apply the present value analysis to value straight and convertible bonds (market value, floor price and conversion premium) Alternative methods for investment appraisal:
- Apply the payback method for investment appraisal
- Apply the book rate of return and the internal rate of return method for investment appraisal

- Understand the properties of a proper investment appraisal method (with reference to the Net Present Value)

	<ul style="list-style-type: none"> <li>Identify the situations where the payback, discounted payback, the book rate of return and the internal rate of return method may be invalidated.</li> <li>Understand the problem of investment under budget constraints</li> <li>Identify and select projects to maximize the total Net Present Value subject to budget Constraints using Profitability Index and formulate problem with multi-period constraints</li> </ul>
Teaching Methodology	<p>The course is delivered to the students by means of lecturers, conducted with the help of computer presentations and the use of the board.</p> <p>The course also involves tutorials on how to solve certain numerical problems and illustrations on how to tackle numerical problems in a software such Excel.</p> <p>The students are engaged in the course through questions by the lecturer which are discussed in class.</p> <p>Lecture notes and other course material like spreadsheet examples are available to students through the e-learning platform.</p>
Bibliography	<p><u>(a) Textbooks:</u>  Brealey, R., Myers, S., and F. Allen, Principles of Corporate Finance, McGraw Hill, 13th edition, 2019  CFA Program Curriculum 2020 Level I-III, Wiley</p> <p><u>(b) References:</u>  ACCA F9, Complete Text, Financial Management, Kaplan Publishing</p>
Assessment	<p><u>(a) Methods:</u> Students will be assessed with coursework that involves written and online assignments (quizzes), a midterm and a final test. The course involves both explaining theoretical concepts and also solving numerical problems in finance.</p> <p><u>(b) Criteria:</u> Assessment criteria are available in each written assignment, midterm or in the final exam <u>(c) Weights:</u></p> <ul style="list-style-type: none"> <li>Assignments (online quizzes) 10%</li> <li>Midterm 30%</li> <li>Final Exam 60%</li> </ul>
Language	English language