Investment Theory subject is taught in the second, second semester, of the Degree in Business Administration from the University Center EDEM, being an obligatory subject.

It belongs to “Principles of Financial Management” and includes part of the body of knowledge necessary to carry out the financial management of any company or organization.

For a financial director, a company is an organization where cash flows come in and out. Cash inflows may occur both through company’s own activity (internal financing) and contributions made by shareholders and other contributors of external capital (external financing). On the opposite side, the application of such funds (cash outflows) can be materialized in investments in fixed assets and working capital, as well as in remuneration of sources of external financing or debt service.

As Professors Brealey, Myers, and Allen state in "Corporate Finance Principles", business organizations must answer two general financial questions: What should the company invest in and how are these investments paid for? this question first, has to do with how to spend money; second, on how to get it. Financial Management of an organization will play a fundamental role answering both questions, with the ultimate and main objective of maximizing company´s value for shareholders.

Basic rule that every financial director should follow will be to obtain cheapest financing and to invest it in most profitable assets. However, in an efficient capital
market, an expected higher return on investment leads to a higher degree of risk assumption, so it will be necessary to find profitability-risk binomial that best suits shareholders and providers of foreign capital preferences.

Theory of Investment subject deals with analysis and valuation of investment projects.

To that end, in addition to basic criteria for investment valuation; risk- profitability ratio of financial assets, portfolio management and CAPM valuation model (Capital Asset Pricing Model) are studied. All these concepts are studied in order to know minimum investment profitability level based on their risk level.

**PRIOR KNOWLEDGE**

**Relationship with other subjects of same degree**

No registration limitations with other subjects of the curriculum are specified.

**Other requirements**

To follow class explanations and understand concepts of the subject is necessary the student has a basic knowledge of Statistics, Accounting Finance and Financial Mathematics.

**COMPETENCES**

**BASIC COMPETENCES:**

- Ability for analysis and synthesis.
- Ability to organize and planning.
- Oral and written communication skills in native language.
- Ability to use business English.
- Ability to use Information and Communication Technologies (ICTs) in the field of study.
- Ability to analyse and search for information from various sources.
- Problem-solving ability.
- Ability to decision-taking.
- Ability to negotiate and reconcile interests effectively.
- Ability to transmit and communicate complex ideas and approaches to both specialist and non-specialist audiences.
- Ability to apply economic principles to the diagnosis and resolution of social issues such as immigration, discrimination and others that affect society and market.
Syllabus
2021 - 2022

- Teamwork ability.
- Skill in personal relationships.
- Critical capacity and self-criticism.
- Commitment to ethics and social responsibility.
- To manage time effectively.
- Capacity to learn independently.
- Capacity for adapting to new situations.
- Creativity.
- Leadership and inspiring others skills.
- Work initiative and entrepreneurship.
- Motivation for quality.
- Capacity to positively contribute to environmental and social issues awareness, and to overcome all forms of discrimination, which is essential for economic development and poverty reduction.
- Ability to coordinate activities

SPECIFIC COMPETENCES:

- Capacity to properly apply a common valuation model for the analysis of financial investment and financing operations.
- Capacity to estimate parameters that define productive investments and to know different valuation methods.
- Capacity to measure and assess the risk of financial assets and their applications in productive investments.
- To understand relationship between opportunity capital cost and financial assets valuation.
LEARNING OUTCOMES

- To distinguish clearly between different types of investment carried by a company and be familiar with relationships between investment and financing decisions.
- To perform analysis of business investment projects.
- To use spreadsheet to analyze different methods of investments valuation, in order to determine a range of variation in the expected project profitability.
- To establish and develop viable investment and financing policies appropriate to business strategies.
- To manage portfolios based on mastery of key tools of assets valuation and markets price establishment.

COURSE CONTENTS

Chapter 1. COMPANY FINANCIAL MANAGEMENT

Basic work of a financial director is divided into:

1) Investment decision or capital budget and
2) Financing decision.

That is, to decide what real assets the company should acquire and how to get the cash needed for it.

This section will discuss the nature and scope of the Financial Function in the company, linking it with the definition of the main objectives that the Financial Management of the Company should pursue. Also, the distinction between economic and financial structure of the company will be analyzed.

Chapter 2. INVESTMENT DECISION

What an investment is? What financial characteristics define it?

We will find concrete definitions to answer these questions and then work on methodology to estimate net cash flows associated to an investment project.

The analysis of different investments, based on the study of their net cash flows, will allow us to classify them according to different criteria.

Chapter 3. NET PRESENT VALUE

Investment theory starts from the premise that a euro today is worth more than a euro tomorrow, because it could be invested today to start generating interest immediately.
This premise is considering money value over time, and any investment rule that does not include such value is unreasonable. Net present value (NPV) is the difference between the present value of the future profitability that an investment will generate and the present value of the future costs involved.

To address the NPV calculation we will analyze: financial markets behavior, consumption-investment patterns adjustment and concepts such as opportunity capital cost, discount rate, etc.

Chapter 4. OTHER EVALUATION CRITERIA

Together with net present value, we have at our disposal other criteria to evaluate and make decisions on different investment alternatives: internal rate of return (IRR), payback period or profitability index, for example.

The combined use of these criteria will allow us to value and order different investment projects.

Chapter 5. SELECTION OF PRODUCTIVE INVESTMENTS WITH MORE FLEXIBLE ASSUMPTIONS

Financial Manager must always base her/his decisions on the premise that available resources are limited, so it must be able to discriminate on different investment alternatives, prioritizing those more profitable and rejecting those less interesting.

Fundamental questions to resolve in this context of financial resources rationalization are: the optimum moment of starting an investment project, selecting between different investments with different duration, etc.

Chapter 6. PROFITABILITY AND RISK OF INVESTMENT PORTFOLIOS

Starting from of profitability and risk of a bond analysis, we will proceed to evaluate profitability and risk of an investment portfolio, which will allow us to verify advantages offered by diversification as a characteristic within an investment policy.

Within this analysis it will be relevant to address distinction between systematic and specific risks, and how investment portfolio definition allows us to manage both types of risk.

Chapter 7. PORTFOLIO MANAGEMENT

From an article written in 1952, Harry Markowitz developed basic principles for building portfolios, demonstrating how an investor reduced the standard deviation of his returns by choosing securities that did not ‘move’ exactly together.

Among theories on portfolio management, the SML, or securities market line, stands out as one of the most important ideas in Finance, providing relationship between performance and risk for any asset in equilibrium. This concept, the SML, will be very useful for assets valuation, as well as for productive investments valuation.
Chapter 8. SELECTION OF PRODUCTIVE RISK INVESTMENTS

Basing the analysis of investments in Net Present Value calculation, key variable to be considered will be discount rate.

There are several models to estimate it taking into account investment risk assumption and certainty levels.

Likewise, for investments evaluation and selection among different alternatives, we have additional tools such as sensitivity analysis (i.e. how expected return on investment evolves from basic assumptions on which it is based) or the analysis of the equilibrium point.

WORKLOAD

<table>
<thead>
<tr>
<th>IN-CLASS ACTIVITIES</th>
<th>HOURS</th>
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<tbody>
<tr>
<td>Lectures</td>
<td>20.0</td>
</tr>
<tr>
<td>Practical sessions, related to problems resolution, case studies, with application of techniques, oral presentations, debates, individually and / or as a team.</td>
<td>40.0</td>
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<tr>
<td><strong>Total in-class activities</strong></td>
<td><strong>60.0</strong></td>
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<tr>
<th>NON-CLASSROOM ACTIVITIES</th>
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<tbody>
<tr>
<td>Autonomous work supervised and based on the reading and evaluation of reports, exercises, practical cases, issues to discuss and online experiments, both individually and in team with tutorial support, including portfolio building activity throughout the course.</td>
<td>40.0</td>
</tr>
<tr>
<td>Self-study of the student and written and/or oral tests.</td>
<td>45.0</td>
</tr>
<tr>
<td>If possible, participation in activities of Forinvest <a href="https://forinvest.feriavalencia.com/">https://forinvest.feriavalencia.com/</a>, or The Chair of International Finance of Banco Santander of the Universitat de València <a href="http://www.catedrafinanzas.es/eventos/">http://www.catedrafinanzas.es/eventos/</a> or extraordinary session given by an outsider on some course content.</td>
<td>5.0</td>
</tr>
<tr>
<td><strong>Total non-classroom activities</strong></td>
<td><strong>90.0</strong></td>
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<tr>
<td><strong>TOTAL</strong></td>
<td><strong>150.0</strong></td>
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TEACHING METHODOLOGY

Lectures will include teacher presentation of the content of the subject. Student participation as well as their critical thinking and debate will be assessed very positively. It is highly recommended to review corresponding book chapter and teacher material prior each session.

Practical classes will consist of solving practices by students, with teacher support and monitoring. For development of these classes, student will be provided with a collection of case studies of which a portion will be assigned to personal homework.

To the possible extent, such case studies will be based on actual examples of business groups, but always on the basis of available public information.

The student will have the necessary material before each class.

EVALUATION CRITERIA

The evaluation of students will be conducted through continuous assessment and summary exams.

There are 2 examination sessions in each course. Each enrolment (matrícula) entitles two examinations (convocatorias).

Students must comply with the rules of writing, spelling and grammar in the development of their assignments and their exams, formal aspects that will be taken into account in the evaluation of the assignments and exams.

A) FIRST EXAMINATION SESSION

The course will be graded according to the following scheme:

A.1 CONTINUOUS ASSESSMENT (40%).

• A.1.1 CLASS PARTICIPATION (20%)

It will be taken into account participation and involvement of students in teaching-learning process to develop throughout the semester, by conducting case studies, analysis assignments, and also taking into consideration their level of class participation, pro-activity and initiative.

Attendance and participation are essential and all students are expected to participate. Intelligent and relevant discussions are expected from each student and it is an important part of the general evaluation of the course. Among other skills, class participation is very important to develop the ability to express and defend one’s ideas with assertiveness so they can learn from each other. We know that active involvement in learning increases what is remembered, how well it is assimilated, and how the learning is used in new situations.
• A.1.2 HOMEWORK (20%)

Assignments are defined in order to cover all the concepts and learning take-aways. All the assignments will be done individually and discussed and solved during classes. The assignments will be due before the start of each session.

Then in this section of continuous assessment it will be fundamental class attendance, level of participation, effort and results in resolution of case studies on which the subject will be developed.

Continuous assessment is in-class and is not recoverable as requires attendance and participation. Therefore, the mark obtained for the continuous assessment of the course will be maintained in both 1st call and 2nd call.

Class attendance is mandatory for an optimal follow-up of the subject, so the absence above 15% of the total number of sessions will mean that the student is not qualified for the continuous assessment part. Consequently, the maximum grade that can be reached will be that obtained in the summary exam(s), with the weight referred to 60%.

Continuous assessment will be weighted in the final mark of 40%.

A.2. SUMMARY EXAMS (60%).

Summary exams will consist of two written examinations, one mid-semester and one at the end, consisting of a battery of multiple-choice questions, as well as several problems for which resolutions will be requested, all with a theoretical and practical approach.

Only chapters of the book and concepts which have already been covered will be subject to examination.

Summary exams are compulsory and to overcome each with a 5 out of 10 is compulsory to pass the course.

The first exam is eliminatory, so that students who pass the first midterm only will be examined of the issues discussed in the second midterm. Students who fail the first midterm will take the final exam, with all the content of the subject.

Students who fail the second exam or did not take it, have to take all the content of the subject in second examination session. There will be no average of the marks of the midterm exams if the student has not obtained at least a 5 out of 10 in each of them.

In no case it will save the mark of any midterm summary exam approved for the second examination session.
Summary exams will be weighted in final mark of 60%.

The final mark in case of first examination session is obtained by weighting the average summary exams (60%) with continuous assessment (40%), and it must obtain a final mark higher than 5 out of 10 points to pass the course. If the final exam is failed, the final mark obtained after applying the prior weighting will be a maximum of 4.5. Thus, if the exam is less than 5 and after applying the weighting the final mark is greater than 4.5, it will remain at that 4.5. If, on the other hand, this grade is less than 4.5, the grade obtained will be maintained.

B) SECOND EXAMINATION SESSION

Students failing in first examination session will have a second examination date. Continuous assessment (40% of total grade) requires attendance and participation and therefore will not be recoverable. As a consequence, the student will maintain the grade received in first examination session.

To pass second examination it must be obtained over 5 on 10 points.

In case the student needs a second examination session, the final mark is obtained by weighting the second examination exam with continuous assessment, and it must obtain a final mark higher than 5 out of 10 points to pass the course.

RE-REGISTRATION AFTER FAILING IN SECOND EXAMINATION SESSION

Students who do not pass the course in 1st / 2nd call and who do not repeat course, will have to register again. They will have the right to 3rd and 4th call.

The evaluation will be as follows:

- Continuous evaluation: 20% of the final grade, which will consist of maximum 8 homework assignments done individually in the same file. Student must send the teacher the file at the end of the semester.

- Exam: 80% of the final grade.

** Segunda matrícula de la asignatura
REFERENCES

Basic reference:


Extra references: