

Academic Year/course: 2022/23

## 39820 - Financial valuation

### Syllabus Information

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**Academic Year:** 2022/23

**Subject:** 39820 - Financial valuation

**Faculty / School:** 326 - Escuela Universitaria Politécnica de Teruel

**Degree:** 634 - Joint Programme in Computer Engineering - Business Administration

**ECTS:** 6.0

**Year:** 2

**Semester:** Second semester

**Subject Type:** Compulsory

**Module:**

## 1. General information

### 1.1. Aims of the course

**The expected results of the course respond to the following general aims**

- Conduct an introduction to the fundamentals of financial operations, so that students are able to identify the correct financial law at any time to obtain equivalence financial expressions and manage both personal and business finances.
- Make available the common financial transactions that occur in the business and personal day to day, both short term and long term.
- Assess annuities to evaluate different investment and financial instruments, as well as their correct use for making decisions.
- Provide students with the necessary financial assessment tools to determine the effective rate of investment alternatives and the effective cost of financing alternatives. Additionally, students will possess tools to compare different alternatives.

These objectives are in line with the Sustainable Development Objectives of Agenda 2030. Objective 4: Quality Education Goal 4.3 Until 2030, to ensure an equity access for men and women to technical quality education including university teaching.

### 1.2. Context and importance of this course in the degree

This compulsory subject was established as part of the mandatory part of the degree, specifically in the second course and the second semester, once students already have some preparation for certain financial transactions. Its content is taken as a starting point for next subjects in the degree.

It is intended that students will be able to assess the most common business and personal financial operations in the short and long term. Therefore, students can compare the cost / return of different financial transactions and thereby provide tools to decide on whether or not to use certain financial sources or savings products. After acquiring this knowledge, the student will continue their financial education with the subject "Financial Management" in the third course.

The interest of this subject lies in the importance and contemporary of the topics studied since its purpose is to show the students the necessary tools to assess financial transactions (both investment and financial) because both companies and people have to face certain financial decisions throughout their life, as, for example, applying for a loan.

### 1.3. Recommendations to take this course

Attendance to class and continuous work by the student are recommended, according to the continuous assessment system proposed for the students who wish to follow it.

## 2. Learning goals

## 2.1. Competences

After completing the course, the student will be competent in the following skills:

1. Understand the operation of all the functional areas of a company or organization, and carry out with ease whatever management function is assigned to them.
2. Assess the situation and foreseeable evolution of business entities and other organizations, make decisions and extract relevant knowledge.
3. Carry out advisory reports on specific situations of markets, sectors, organizations, companies and their functional areas.
4. Understand and apply professional criteria and scientific rigor to solve economic, business and organizational problems.
5. Capacity to solve problems.
6. Capacity for analysis and synthesis.
7. Communicate oral and writing correctly, emphasizing argumentation.
8. Ethical commitment at work.
9. Capacity to work in team.
10. Apply knowledge to practice.

## 2.2. Learning goals

The student, in order to pass the course, will have to show her/his competence in the following skills:

1. To examine the fundamentals of financial valuation.
2. To classify and assess short-term financial transaction, such as bank discount and factoring.
3. To classify and assess financial products, such as those traded on money markets, according to the detail worked in class.
4. To compare and evaluate different annuities which may occur in any financial transaction and establish equivalences
5. To distinguish and classify financial laws to assess long-term financial operations such as investment and lending.

## 2.3. Importance of learning goals

The learning outcomes obtained in the subject are important for students because:

- The students will learn the suitability to undertake certain transactions in the short-term market (bank discount, buying Treasury bills, etc...), which is essential for the correct functioning of organizations.
- The students will understand the importance of proper assessment of several annuities for the investment and financial making decisions.
- The students will understand and compare the return of different and common constitution operations in the business world (savings plans, pension plan contributions, etc...), which will facilitate communication and negotiating of financial terms with professionals.
- The students will understand and compare the cost of different funding sources (loans, factoring, leasing, etc...) which will facilitate communication and negotiating of financial terms with professionals.

## 3. Assessment (1st and 2nd call)

### 3.1. Assessment tasks (description of tasks, marking system and assessment criteria)

The student will prove that he/she has achieved the expected learning results by means of the following assessment tasks: In the first call, there are two evaluation systems:

#### Continuous assessment system.

It consists of two written exams: the first will be at the end of unit 4 and the second at the end of unit 6 (in dates established by the Faculty for this kind of exams). These exams consist of both theoretical and practical questions, and the subject (units) accumulates. To pass each of the exams as well as the whole subject by this continuous assessment system, the student has to obtain a minimum score of 1,5/5 in theory and 1,5/5 in practice, being necessary to reach a minimum score of 4/10 in the whole exam.

When the required score has not been obtained in any of these parts (theory and/or practice), the final score will be the lowest of both scores.

Additionally, two group works (formed by 2 to 4 people) will take place, consisting of short reports of specific financial transactions that students can observe in the markets. The specific task of these works and activities will be explained by the teacher.

The weight distribution of the different written exams is as follows:

- First written exam: 45%
- Second written exam: 45%
- Works, class participation and group exhibitions: 10%

To pass by continuous assessment, students are required to have presented to all written exams and work presentations, if it is applicable, and obtain a minimum score of 4/10 in each of the written exams and the average should be equal or higher than 5/10. The students who fail the first written exam with a grade lower than 4/10 can not choose the continuous assessment.

### Global assessment system

In this system the student will perform a final written exam which accounts for 100% of the assessment in the official date established by the Faculty. This exam will consist of both theoretical and practical questions. To pass the exam, the student has to obtain a minimum score of 1,5/5 in theory and 1,5/5 in practice and the final grade should be equal or higher than 5/10. When the required score has not been obtained in any of these parts (theory and/or practice), the final score will be the lowest of both scores.

In the global assessment exam, theoretical questions may be open, essays or test type. In the practical part, exercises and practical cases will be proposed.

To pass the subject, the student has to obtain at least 5 points out of 10.

ON SECOND CALL, the assessment will be carried out through a global exam of 10 points with the same standards established for the global exam of the first call.

To pass the subject, the student has to obtain at least 5 points out of 10.

### Valuation criteria

It is going to assess that the student knows, understands and is able to use, in different contexts, the concepts studied in the subject. Furthermore, the ability to integrate the knowledge acquired will be assessed.

In any case, it will be assessed the confidence degree in the answers, the absence of formal errors, clarity and order in the result presentation for the questions raised in the exams and practical works. Equally, the reflection and brainstorming of the works or interventions, as well as the regularity of active participation in classroom, may be assessed.

All these events are considered to be performed in a face-to-face system but according with potential health advices they would be carried out in an on-line system (partially or totally).

In the on-line system, the student might be recorded. The student rights are provided in:

[https://protecciondatos.unizar.es/sites/protecciondatos.unizar.es/files/users/lopd/gdocencia\\_reducida.pdf](https://protecciondatos.unizar.es/sites/protecciondatos.unizar.es/files/users/lopd/gdocencia_reducida.pdf)

The appropriate software will be used to check the originality of the activities carried out. In case of plagiarism or copy in an activity the grade will be 0 points in it.

## 4. Methodology, learning tasks, syllabus and resources

### 4.1. Methodological overview

The methodology followed in this course is oriented towards the achievement of the learning objectives. A wide range of teaching and learning tasks are implemented, such as lectures, practice sessions and practical assignments sessions.

### 4.2. Learning tasks

This course is organized as follows:

- **Lectures** (30 hours). In these sessions the lecturer exposes the basic concepts of financial transactions as well as the financial laws that allow assessing these operations with the objective that the student calculates and reflects on the cost / return of different financial operations by solving simple theoretical-practical cases in the classroom. At these sessions. Student participation will be encouraged in order to discuss the most important concepts analyzed in each session. Students will have access to the recommended bibliography recommended and they must study each unit before attending to the corresponding session.
- **Practice sessions** (30 hours). Every week, in addition to the lectures, students will have a problem-solving session of problems and case studies to solve on the blackboard and computer. In connection with these problem-solving sessions and cases, students are expected to be particularly active due to the split of groups.
- **Practice sessions - P6** . If these sessions take place, students will present and defend the proposed practical cases.
- **Tutorials, seminars, assignments and autonomous work** (90 hours).

All these events are considered to be performed in a face-to-face system but according with potential health advices they would be carried out in an on-line system (partially or totally).

### 4.3. Syllabus

This course will address the following topics:

## **Section 1. Fundamentals of Financial Valuation**

### **Topic 1. Fundamentals of Financial Valuation**

- 1.1. Financial capitals and financial operations
- 1.2. Rational behavior in comparisons of financial capitals
- 1.3. Financial Law and the effect of compounding periods

## **Section 2. Valuation of Short-Term Financial Operations**

### **Topic 2. Short-Term Financial Operations**

- 2.1. Equivalent sums with simple financial law
- 2.2. Bank discount
- 2.3. Factoring

### **Topic 3. Valuation of Financial Operations in Short-Term Public Debt Markets**

- 3.1. Characteristics of financial operations in short-term public debt markets
- 3.2. Treasury Bills: primary and secondary markets
- 3.3. Repo operations

## **Section 3. Assessment of annuities**

### **Topic 4. Annuities**

- 4.1. Concept and elements of an annuity
- 4.2. Constant and immediate annuities
- 4.3. Advance and deferred annuities
- 4.4. Arithmetical progression annuities
- 4.5. Geometrical progression annuities
- 4.6. General annuities

## **Section 4: Assessment of Long-term Financial Operations**

### **Topic 5. Deposits**

- 5.1. Introduction to deposits
- 5.2. Annuity due deposits
- 5.3. Immediate deposits

### **Topic 6. Loans**

- 6.1. Introduction to loans
- 6.2. Method of constant principal payments
- 6.3. French amortization method
- 6.4. Variable installment loans
- 6.5. Variable rate loans
- 6.6. The effective rate of loans

## **4.4. Course planning and calendar**

In case of the P6 practice sessions taking place, dates and the timetable will be available on the respective notice board.

Further information concerning the timetable, classroom, office hours, assessment dates and other details regarding this course, will be provided on the first day of class or please refer to the Moodle website (<https://moddle2.unizar.es>); Academic calendar website (<https://academico.unizar.es/calendario-academico/calendario>); or the website of your corresponding faculty ( Zaragoza: <https://econz.unizar.es/>, Huesca: <http://fegp.unizar.es/>, Teruel: <http://fcsh.unizar.es/>).