

**COURSE DATA****Data Subject**

<b>Code</b>	44210
<b>Name</b>	Assessment of businesses and complex projects
<b>Cycle</b>	Master's degree
<b>ECTS Credits</b>	3.0
<b>Academic year</b>	2022 - 2023

**Study (s)**

<b>Degree</b>	<b>Center</b>	<b>Acad. year</b>	<b>Period</b>
2195 - M.U. en Finanzas Corporativas	Faculty of Economics	1	Second term

**Subject-matter**

<b>Degree</b>	<b>Subject-matter</b>	<b>Character</b>
2195 - M.U. en Finanzas Corporativas	4 - Assessment and risk	Obligatory

**Coordination**

<b>Name</b>	<b>Department</b>
FARINOS VIÑAS, JOSE EMILIO	172 - Business Finance

**SUMMARY**

La asignatura *Valoración de Empresas y Proyectos Complejos* profundiza en aspectos de la valoración de proyectos y empresas que fueron introducidos en asignaturas de grado a través del método del descuento de flujos de caja, tales como el análisis de la incertidumbre o la estimación del coste de oportunidad del capital en ambiente de riesgo. Además, esta asignatura amplía el abanico de métodos de valoración al introducir el método de la valoración relativa mediante comparables de mercado y el empleo de opciones reales en el proceso de valoración. Los conceptos estudiados en esta asignatura son necesarios en todos aquellos procesos en los que de una forma u otra es necesaria la valoración de la empresa: disputas judiciales, fusiones y adquisiciones, salidas a bolsa, etc.

**PREVIOUS KNOWLEDGE**



### Relationship to other subjects of the same degree

There are no specified enrollment restrictions with other subjects of the curriculum.

### Other requirements

El estudio de las metodologías relacionadas con la valoración de empresas supone el empleo práctico de un considerable número de conceptos provenientes de diferentes ámbitos: financiero (modelos de planificación financiera, estructura de capital, modelos de valoración de activos de capital, modelos de valoración de activos derivados), contable (estructura del balance y cuenta de pérdidas y ganancias, relaciones entre las distintas partidas contables), estadísticos (estadística descriptiva, funciones de dist

## OUTCOMES

### 2195 - M.U. en Finanzas Corporativas

- Students should apply acquired knowledge to solve problems in unfamiliar contexts within their field of study, including multidisciplinary scenarios.
- Students should be able to integrate knowledge and address the complexity of making informed judgments based on incomplete or limited information, including reflections on the social and ethical responsibilities associated with the application of their knowledge and judgments.
- Students should communicate conclusions and underlying knowledge clearly and unambiguously to both specialized and non-specialized audiences.
- Students should demonstrate self-directed learning skills for continued academic growth.
- Students should possess and understand foundational knowledge that enables original thinking and research in the field.
- Integrar en el área financiera de la empresa las nuevas tecnologías en su labor profesional.
- Analizar de forma crítica tanto su trabajo como responsable de las finanzas empresariales, como el de sus compañeros.
- Ser capaz de buscar, seleccionar y valorar información emanada de los distintos agentes del entorno, a través de métodos tradicionales y de las tecnologías de la información y de la comunicación para utilizarla de forma efectiva ante problemas y situaciones relacionadas con las finanzas corporativas.
- Trabajar en equipo con eficacia y eficiencia tanto en el área financiera como en las otras áreas funcionales de la empresa.
- Tomar decisiones tanto individuales como colectivas en su labor profesional como responsable financiero de la empresa.
- Comparar los modelos básicos de valoración de activos financieros y sus limitaciones así como precisar la relación existente entre mercados financieros y finanzas empresariales.



- Comparar y priorizar los diferentes métodos de valoración de empresas, proyectos y marcas, así como sus limitaciones.
- Interpretar y juzgar la valoración de la empresa proporcionada por un experto externo.

## LEARNING OUTCOMES

A partir de los conocimientos teóricos y prácticos obtenidos en la asignatura, el alumno debe ser capaz de:

- Analizar y valorar de forma avanzada mediante el descuento de flujos de caja tanto proyectos como empresas en su conjunto.
- Analizar y valorar empresas y proyectos mediante técnicas de valoración relativas.
- Comprender las técnicas de valoración mediante opciones reales.
- Comprender las dificultades inherentes a la valoración y plantear soluciones según cada caso particular.
- Proporcionar los análisis necesarios para resolver la situación planteada.
- Relacionar conceptos aprendidos en asignaturas previas.

## DESCRIPTION OF CONTENTS

### 1. Topic 1. DFC Method (I): Projecting Cash Flows

The discounted cash flow valuation method (DFC method) is based on two basic aspects: the estimation of the company's future cash flows and the estimation of the appropriate discount rate, i.e. the estimation of the company's cost of capital. This section will introduce methods for estimating cash flows based on the firm's own historical performance and other available information.

Basic bibliography

Benninga (2014): Ch. 4, 5 and 6

### 2. Topic 2. DFC Method (II): Uncertainty Analysis Techniques

In any valuation process it is essential to investigate the sources of uncertainty in future cash flow projections. For this purpose, there are different techniques widely used by practitioners. In particular, we consider sensitivity analysis, scenario analysis and Monte Carlo simulation. The latter technique is particularly useful when cash flows are subject to multiple sources of uncertainty, since in these cases determining their expected value is very complex.

Basic bibliography

Brealey et al. (2010): Ch. 11

Titman and Martin (2009): Ch. 3



### **3. Topic 3. DFC Method (III): Estimation and use of the cost of capital**

Once the uncertainty associated with the estimation of cash flows has been analysed, it is necessary to address the estimation of the opportunity cost of capital as a fundamental element in the valuation process. To this end, concepts previously studied in the Master's Degree in Corporate Finance will be used, specifically in the subjects Financial Markets and Corporate Decisions and Debt and Dividend Policies. In this way it will be possible to estimate the company's cost of capital, taking into account both its economic risk and its financial risk.

Basic bibliography

Benninga (2014): Ch. 3

Titman and Martin (2009): Ch. 4 and 5

### **4. Topic 4. Relative valuation by market comparables**

Once we have studied the discounted cash flow valuation method, we introduce relative valuation (or valuation using market comparables), which uses market prices observed in transactions to calculate the value of a company or investment opportunity. Although there are different methods of relative valuation, we will focus on valuation using EBITDA multiples and price/earnings ratios.

Basic bibliography

Titman and Martin (2009): Ch. 6

### **5. Topic 5. Two-step approach to business valuation**

Although relative valuation approaches are often seen as substitutes for discounted cash flow analysis, this section will explore how the two approaches are complementary in valuation processes.

Basic bibliography

Titman and Martin (2009): Ch. 7

### **6. Topic 6. Derivative assets and the valuation of real investments**

The use of real options in the valuation of complex companies and projects is introduced. The real options approach is based on two important ideas: on the one hand, that financial markets often publish prices that can be used to value future cash flows; and, on the other hand, that uncertainty and flexibility are related in a way that influences expected cash flows.

Seminar with compulsory attendance by Professor Susana Alonso (University of Valladolid).

**WORKLOAD**

ACTIVITY	Hours	% To be attended
Computer classroom practice	10,00	100
Theoretical and practical classes	9,00	100
Group work	8,00	100
Tutorials	2,00	100
Seminars	1,00	100
Attendance at events and external activities	2,00	0
Study and independent work	21,00	0
Resolution of case studies	22,00	0
<b>TOTAL</b>	<b>75,00</b>	

**TEACHING METHODOLOGY**

During the course, the contents of the programme will be worked on simultaneously with the theoretical and practical content.

Theoretical classes will be taught using the lecture methodology, in which the lecturer will detail the fundamental aspects of each subject and explain the most relevant concepts, facilitating the study of the same through the indicated bibliography, to which the student must refer to complete and deepen their knowledge of the subject, and the material prepared for this purpose.

The practical classes will consist of the consideration of questions and exercises of an applied nature and which have been previously raised in the theoretical classes, with the student having to actively participate in the development of the activity by discussing the solution and using the appropriate computer techniques for its resolution.

In addition to these face-to-face activities, the student must carry out other activities aimed at independent learning, such as individual study, the preparation of assessment activities, or the carrying out of individual or group work. For the successful completion of these activities, tutoring, carried out either individually or in groups, is a particularly important teaching resource as it allows the teacher to know the level of progress of the group, and the student to receive personalised guidance in their training programme. Consequently, throughout the training period of the subject, the use of this teaching resource is recommended and encouraged.

The virtual classroom (<https://aulavirtual.uv.es/>) facilitates the development of these methodologies, as it contains all the teaching material and allows fluid contact between teacher and student.





## EVALUATION

In order to assess the learning of the subject, a diversified assessment system will be used, which will allow the different knowledge and skills acquired by the students to be highlighted.

Thus, 30% of the final grade will be given by continuous assessment, which involves class attendance and participation, and the completion of three individual activities during the training period. In order for the proposed activities to be assessed, they must be handed in on the date and in the manner stipulated for each of them.

Through the proposed activities, the student will proceed, step by step, to the valuation of an unlisted company of their choice, preferably Spanish or American. The activities to be carried out are as follows:

Activity 1: to propose a financial model for the company chosen by the student and to project its free cash flows (FCF).

Value of the activity: 1 point.

Activity 2: Carry out an analysis of the uncertainty associated with the FCF projection made in Activity 1.

Value of the activity: 1 point.

Activity 3: estimate the cost of capital (rWACC) of the selected company.

Value of the activity: 1 point.

The purpose and nature of these continuous assessment tests is to encourage and assess the progressive and continuous work and learning of the student throughout the course, as specified in article 6 point 3 of the Regulations on Assessment and Grading of the University of Valencia for Bachelor's and Master's degrees, which states: "Continuous assessment is one of the basic criteria of the teaching programme, and must be understood as a tool of the teaching-learning process that informs the student about their progress and assesses it". Given the final nature of these continuous assessment tests, they cannot be made up at the second sitting.

The remaining 70% of the final grade will be obtained by means of a written exam, which will consist of several short questions and case studies. The questions and case studies are intended to assess the student's ability to synthesise the relevant information and provide an appropriate solution to the problems posed. The specific marks for each section will be specified in the exam.

In order to obtain the final mark for the course, the student must obtain a minimum mark of 3.5 points in the written exam so that the mark obtained in the continuous assessment can be added to this mark.

Unexcused non-attendance at the seminar that constitutes Topic 6 will be penalised with 1.5 points on the final mark.

In case of failing the first exam, the mark obtained in the continuous assessment will be kept to be added to the mark obtained in the written exam of the second exam. The same assessment criteria will be used in the second round as in the first round.

The grading system will be expressed by means of a numerical grade in accordance with the provisions of art. 5 of R.D. 1125/2003, of 5 September, which establishes the European credit system and the grading system for official university degrees valid in Spain.



## REFERENCES

### Basic

- Benninga, S. (2014): Financial Modelling. The MIT Press. London.
- Brealey, R.A., S.C. Myers y F. Allen (2010): Principios de Finanzas Corporativas. McGrawHill. Madrid.
- Titman, S. y J.D. Martin (2009): Valoración. PrenticeHall. Madrid.
- Titman, S. y J.D. Martin (2011): Valoración. PrenticeHall. Madrid. (Acceso online)

### Additional

- Berck, J. y P. DeMarzo (2011): Corporate Finance. Pearson.
- Copeland, T.E., J.F. Weston y K. Shastri (2005): Financial Theory and Corporate Policy. Pearson.
- Marín, M y G. Rubio (2001): Economía Financiera. Antoni Bosch editor.
- Ross, S., R.W. Westerfield y J.F. Jaffe (2005): Finanzas Corporativas. McGrawHill. México D.F.
- Página web del profesor Aswath Damodaran (Stern School of Business, New York University):  
<http://pages.stern.nyu.edu/~adamodar/>

Página web del profesor Kenneth French (Tuck School of Business, Universidad de Darmouth):  
<http://mba.tuck.dartmouth.edu/pages/faculty/ken.french/>