



## Teaching Guide

Identifying Data					2022/23
<b>Subject (*)</b>	Financial Operations Analysis		<b>Code</b>	611G02004	
<b>Study programme</b>	Grao en Administración e Dirección de Empresas				
Descriptors					
<b>Cycle</b>	<b>Period</b>	<b>Year</b>	<b>Type</b>	<b>Credits</b>	
Graduate	1st four-month period	First	Basic training	6	
<b>Language</b>	Galician				
<b>Teaching method</b>	Face-to-face				
<b>Prerequisites</b>					
<b>Department</b>	Empresa				
<b>Coordinador</b>	Suarez Massa, Maria Isabel Ana		<b>E-mail</b>	isabel.suarez.massa@udc.es	
<b>Lecturers</b>	Alvarez Garcia, Begoña Boedo Vilabella, Lucia Enriquez Díaz, Joaquín Lagoa Varela, Maria Dolores Longarela Ares, Ángeles María Pérez Seijo, Jorge Suarez Massa, Maria Isabel Ana		<b>E-mail</b>	begona.alvarez@udc.es lucia.boedo@udc.es joaquin.enriquez@udc.es dolores.lagoa@udc.es angeles.maria.longarela.ares@udc.es jorge.perez.seijo@udc.es isabel.suarez.massa@udc.es	
<b>Web</b>	udc.fernandoaguair.es				
<b>General description</b>	The objective of the subject is to know: a) The elements that intervene in financial operations. b) The financial laws most used in financial practice. c) The characteristics, operations and usefulness of the most common financial operations.				

## Study programme competences / results

Code	Study programme competences / results
A1	Manage an enterprise or small organization, understanding their competitive and institutional position and identifying their strengths and weaknesses
A2	Integrate in any functional area of micro-firms or SMEs and perform fluently any management task commissioned
A3	Evaluate and foreseeing, from relevant data, the development of a company.
A4	Elaborate advisory reports on specific situations of companies and markets
A5	Write projects about specific functional areas (e.g. management, marketing, financial) of the company
A6	Identify the relevant sources of economic information and to interpret the content.
A8	Derive, based on from basic information, relevant data unrecognizable by non-professionals.
A9	Use frequently the information and communication technology (ICT) throughout their professional activity.
A11	To analyze the problems of the firm based on management technical tools and professional criteria
A12	Communicate fluently in their environment and work by teams
B1	CB1-The students must demonstrate knowledge and understanding in a field of study that part of the basis of general secondary education, although it is supported by advanced textbooks, and also includes some aspects that imply knowledge of the forefront of their field of study
B2	CB2 - The students can apply their knowledge to their work or vocation in a professional way and have competences typically demonstrated by means of the elaboration and defense of arguments and solving problems within their area of work
B3	CB3- The students have the ability to gather and interpret relevant data (usually within their field of study) to issue evaluations that include reflection on relevant social, scientific or ethical
B4	CB4-Communicate information, ideas, problems and solutions to an audience both skilled and unskilled
B5	CB5-Develop skills needed to undertake further studies learning with a high degree of autonomy
B6	CG1-Perform duties of management, advice and evaluation in business organizations
B7	CG2-Know how to use the concepts and techniques used in the various functional areas of the company and understand the relationships between them and with the overall objectives of the organization



B8	CG3- Know how to make decisions, and, in general, assume leadership roles.
B9	CG4-Learn to identify and anticipate opportunities, allocate resources, organize information, select and motivate people, make decisions under conditions of - uncertainty, achieve the proposed objectives and evaluate results
B10	CG5-Respect the fundamental and equal rights for men and women, promoting respect of human rights and the principles of equal opportunities, non-discrimination and universal accessibility for people with disabilities.
C1	Express correctly, both orally and in writing, in the official languages of the autonomous region
C4	To be trained for the exercise of citizenship open, educated, critical, committed, democratic, capable of analyzing reality and diagnose problems, formulate and implement knowledge-based solutions oriented to the common good
C5	Understand the importance of entrepreneurial culture and know the means and resources available to entrepreneurs
C6	Assess critically the knowledge, technology and information available to solve the problems and take valuable decisions
C7	Assume as professionals and citizens the importance of learning throughout life.
C8	Assess the importance of research, innovation and technological development in the economic and cultural progress of society.

Learning outcomes			
Learning outcomes	Study programme competences / results		
Use the appropriate computer tools to achieve more efficiency in the calculations necessary in the previous sections.	A9 A11		C6
Be able to value financial income as well as identify in which economic-financial operations and for what such values ??must be applied.	A5 A6 A8 A9 A11		C8
Know the principles that govern the operation of financial laws used in practice, along with their application to specific financial operations.	A1 A2 A8 A9 A11		C4 C5
Know and identify the concept of financial operation, as well as its components, costs and returns. Know how to use these concepts in specific financial operations and, particularly, in the concepts of APR and Amortized Cost.	A3 A4 A8 A9 A11		C1
Know, value and develop loan operations, both from the point of view of the lender and the borrower.	A8 A9 A11 A12		C7



<p>Know how to apply the knowledge to your work in a professional way and possess the competences that are usually demonstrated through the preparation and defense of arguments and the resolution of problems within your area of work.</p> <p>- Know how to collect and interpret relevant data (usually within their area of study) to issue judgments that include a reflection on relevant issues of a social, scientific or ethical nature</p> <p>- Transmit information, ideas, problems and solutions to a specialized and non-specialized audience</p> <p>-Develop learning skills necessary to undertake further studies with a high degree of autonomy</p> <p>-Know how to perform management, advisory and evaluation tasks in business organizations</p> <p>- Know how to manage the concepts and techniques used in the different functional areas of the company, as well as understand the relationships that exist between them and with the general objectives of the organization.</p> <p>- Know how to make decisions, and, in general, assume managerial tasks.</p>	<p>B1</p> <p>B2</p> <p>B3</p> <p>B4</p> <p>B5</p>	
<p>Know how to identify and anticipate opportunities, allocate resources, organize information, select and motivate people, make decisions in uncertainty, achieve the proposed objectives and evaluate results.</p> <p>- Respect the fundamental rights and equality between men and women, respect the promotion of Human Rights and the principles of equal opportunities, non-discrimination and universal accessibility for people with disabilities.</p>	<p>B6</p> <p>B7</p> <p>B8</p> <p>B9</p> <p>B10</p>	

Contents	
Topic	Sub-topic
Finance laws. General concepts	<ol style="list-style-type: none"> <li>1. Concept of economic good.</li> <li>2. Economic activity and financial activity.</li> <li>3. Concept of financial capital and graphic representation.</li> <li>4. Financial projection: concept and classes.</li> <li>5. Financial laws: concept, characteristics and properties.</li> </ol>
Financial laws used in practice.	<ol style="list-style-type: none"> <li>1. Simple and compound capitalization.</li> <li>2. Simple commercial and rational or mathematical discount. Commercial and rational compound discount.</li> <li>3. Continuous capitalization.</li> <li>4. Equivalent interest rates.</li> </ol>
Financial operations	<ol style="list-style-type: none"> <li>1. Concept, classes and components. Financial balance.</li> <li>2. Mathematical reserve or financial balance. Concept and methods of determination.</li> <li>3. Actual costs and returns.</li> <li>4. Practical applications. The APR concept. The effective cost and performance in the valuation rules of the General Accounting Plan. The Amortized Cost table according to the valuation rules of the General Accounting Plan.</li> <li>5. Financial sum and unified capital.</li> </ol>
Income valuation	<ol style="list-style-type: none"> <li>1. Concept, components and classes of income.</li> <li>2. Valuation of income. General method and particular cases.</li> <li>3. Practical applications. Obtaining the Net Present Value or Capital Value of an investment. Capital formation.</li> </ol>



Loan operations	<ol style="list-style-type: none"> <li>1. Concept of loan. Typology of loans.</li> <li>2. The financial balance in loan operations.</li> <li>3. Amortization tables. Concept, classes and obtaining these according to the different typologies.</li> <li>4. Financial value of a loan.</li> <li>5. Commercial characteristics of the loans: the lack and early repayment.</li> <li>6. The calculation of the effective cost for the lender, of the yield for the lender and of the APR and the CER second regulation of the Bank of Spain.</li> </ol>
-----------------	--

Planning				
Methodologies / tests	Competencies / Results	Teaching hours (in-person & virtual)	Student's personal work hours	Total hours
Mixed objective/subjective test	A5 A6 A8 A11 B2 B3	2	11	13
Short answer questions	A5 A6 A8 B2 B3 B4 B5	2	6	8
Problem solving	A8 A11 B1 B2 B3	25	50	75
Seminar	A3 A4 A8 A9 A11 B3 C6	3	6	9
Guest lecture / keynote speech	A1 A2 A5 A6 A8 A11 A12 B6 B7 B8 B9 B10 C1 C4 C5 C6 C7 C8	14	30	44
Personalized attention		1	0	1

(\*)The information in the planning table is for guidance only and does not take into account the heterogeneity of the students.

Methodologies	
Methodologies	Description
Mixed objective/subjective test	<p>. A theoretical-practical exam consists of two contents of the subject, with short questions, questions to be developed, questions about practical subjects, test-type questions (true / false), multiple-choice questions or a combination of two types mentioned.</p> <p>2. Or it can be oral or written. If nothing to the contrary is published on the web page of the subject (Moodle) 48 hours in advance, or it will be written.</p> <p>3. Celebrate nas data, hours and classrooms that or Dean set officially.</p>
Short answer questions	<p>1. They consist of an exam on a part of the subject and can be short answers, test type (true / false), multiple choice, questions to develop and questions about practical cases or a combination of them.</p> <p>2. The exam can be oral or written. If nothing to the contrary is said in the call for the test in Moodle, the exam will be written. Its duration is between 20 and 60 minutes.</p> <p>3. The group can be subdivided to carry out the tests into as many subgroups as the teacher of the subject deems appropriate.</p>



<p>Problem solving</p>	<p>1. Presentation and solution of practical examples about the theoretical contents.</p> <p>2. The practices and examples are interspersed with the theoretical contents in order to facilitate the understanding of the subject.</p> <p>3. In the solution of the practical examples the student can intervene: a) the own initiative, after asking for a word b) on the initiative of the teacher, who will expressly request the intervention of the student.</p> <p>4. Exercises to be carried out by the student during non-contact hours or autonomous work will be formulated. In subsequent face-to-face hours, a review of the exercises in which the student can intervene will be carried out and the corresponding series of questions will be opened in order to clarify those aspects that the student formulates about the content of these.</p>
<p>Seminar</p>	<p>It is a total of 4 additional hours of teaching to be taught throughout the semester in small groups of students. They will be carried out in three 80-minute sessions in the months of October, November and December respectively through Microsoft Teams or in person and outside the usual class hours on the date and time agreed with the teacher.</p> <p>The objectives of the seminar are:</p> <p>a) Discuss with the student any theoretical doubt about the part of the subject explained up to that moment</p> <p>b) Resolution of exercises of the part of matter explained up to that moment.</p>
<p>Guest lecture / keynote speech</p>	<p>Master Session</p> <p>1. Presentation in face-to-face classes of the theoretical and practical contents of the subject in order to guide the student in his preparation.</p> <p>2. The time dedicated to each of the chapters into which the subject is divided will be proportional to the degree of difficulty in the preparation of these and their length, so that the same time will not be dedicated to each of the chapters, but that will delve deeper into some than others. All this, in the opinion of the teacher who teaches the subject.</p> <p>3. For the preparation of the chapters with the least difficulty in understanding, the student could be referred to the bibliography, although in this case, in-person classes will be guided about: a) what specific sources are recommended to use b) what aspects are the most relevant and of greatest interest in order to achieve the learning outcomes established for the subject.</p>

**Personalized attention**

Methodologies	Description
<p>Problem solving Seminar Short answer questions Guest lecture / keynote speech</p>	<p>1. In the master session, the student can intervene, after asking for the floor, to ask, clarify or present their point of view on the subject that is being discussed at the time of their intervention.</p> <p>2. In the solution of problems and in the seminars the student can intervene as it is exposed in the methodologies section.</p> <p>3. In the tutoring schedules set by each teacher, the student will be attended, upon request for an appointment and with the limits established by the regulations of teaching dedication of the UDC faculty to clarify those doubts that arise for the preparation of the subject .</p> <p>4. Without mentioning the person who evacuated the query, it can be published in Moodle, along with their response, so that other students can take advantage of it. All this if the teacher considers it appropriate and of general interest.</p> <p>5. Students with recognition of part-time dedication and academic waiver of attendance exemption, will agree at the beginning of the course a specific schedule of tutoring compatible with their dedication. To do this, you must contact the teacher during the first ten days of the semester in which the subject is taught.</p>

**Assessment**

Methodologies	Competencies / Results	Description	Qualification
---------------	------------------------	-------------	---------------



Mixed objective/subjective test	A5 A6 A8 A11 B2 B3	<p>1. This is a single test for each of the evaluation opportunities of the call.</p> <p>2. At the first opportunity, an examination of items 4 and 5 of the program will be carried out, which will account for 55% of the final evaluation grade.</p> <p>In the second opportunity, an exam of the total subject will be carried out and it supposes 100% of the evaluation note.</p> <p>3. These tests will be carried out on the official dates following the criteria set forth in the methodologies.</p>	55
Short answer questions	A5 A6 A8 B2 B3 B4 B5	<p>1. Two tests throughout the semester.</p> <p>2. The first includes items 1 and 2 and accounts for 25% of the grade in the final evaluation of the first opportunity, the second includes item 3 and accounts for 20% of the final evaluation grade in the first opportunity.</p> <p>3. They consist of an exam following the criteria set out in methodologies</p>	45

### Assessment comments

1. Qualification of no presented. It corresponds to the student, when only it participate of activities of evaluation that have an inferior weighting to 20% on the final qualification, with independence of the qualification reached.
  2. First chance. The evaluation criteria previously mentioned in this section will be applied: two tests throughout the semester and a third on the date of the official exam.
  3. Second chance. There will be a single exam that includes the entire syllabus and will account for 100% of the final grade for this opportunity. The marks obtained in the tests carried out to qualify for the first opportunity will not be taken into account in any case to qualify for this second opportunity.
  4. Advance call. A mixed test will be carried out aimed at evaluating all the competences and contents of the subject. The result obtained in this test will account for 100% of the final grade obtained by the student.
  5. Students with recognition of dedication part time and dispenses academicians of exemption of assistance. The evaluation of these students will govern by the same criteria applied to the rest of the students. For the realisation of the proofs of brief answer will have to put in communication with his professors to beginning of the academic course with the end to agree a compatible specific calendar with his dedication
  6. On conditions of final evaluation. The only utensils with which is allowed the access to the enclosure of the proof are the basic to answer to the examination: pencil, pen or feather, rubber to erase and electronic calculator no programmable. It is on purpose forbidden the access to the enclosure of the examination with: to) mobile telephones and any one other able devices of communication to distance and/or of storage of information; b) aim, annotations, books or similar material that was not authorised on purpose in the announcement of the examination or in the web page (Moodle) of the matter. The no observance of this norm supposes that it consider made the proof in fraud and this with independence that the one who have in the enclosure of the proof such devices or distinguished material used them or no in the course of this.
  7. Identification of the student. The student has to accredit his personality in accordance with the valid rule.
  8. Other observations of evaluation. The no made proofs mark like zero. The made in fraud suppose the qualification of zero points in the announcement remaining invalidated any qualification that the student had been able to obtain during the course by means of the realisation of the activities of evaluation.
- The criteria of punctuation of each one of the proofs will give to know in the moment of the proof and will supply together with the billed of this.

### Sources of information



<p><b>Basic</b></p>	<p>- Aguiar Maragoto, F. J. y Martínez Fernández, P. (2009). Apuntes de Análisis de las operaciones financieras.</p> <p>- J. Enríquez Díaz y R. Pesqueira Sanchez (2020). Matemáticas financieras. Teoría y práctica. Santiago. Andavira</p> <p>- Joaquín Enríquez Díaz (2018). Matemáticas financieras: a través de supuestos prácticos. A Coruña Repronor SL</p> <p>BIBLIOGRAFÍA ELECTRÓNICA: Ramón Pintado, T. María del Carmen Lozano Gutiérrez y Ramón Llorens, M. C. (2015). Matemáticas de las operaciones financieras. Universidad Politécnica de Cartagena. <a href="https://elibro-net.accedys.udc.es/es/lc/bibliotecaudc/titulos/44000">https://elibro-net.accedys.udc.es/es/lc/bibliotecaudc/titulos/44000</a> Tomás, N. (2015). Operaciones financieras en diversos escenarios. Ediciones UNL. <a href="https://elibro-net.accedys.udc.es/es/lc/bibliotecaudc/titulos/78509">https://elibro-net.accedys.udc.es/es/lc/bibliotecaudc/titulos/78509</a> Montero Espinosa Curso de matemáticas financieras <a href="https://www.youtube.com/channel/UCiSbnw9sZjvuxbp1s3zelnQ">https://www.youtube.com/channel/UCiSbnw9sZjvuxbp1s3zelnQ</a> David Moreno Muñoz, María Gutiérrez Urtiaga Ramón Pintado, T. María del Carmen Lozano Gutiérrez y Ramón Llorens, M. C. (2015). Matemáticas de las operaciones financieras. Universidad Politécnica de Cartagena. <a href="https://elibro-net.accedys.udc.es/es/lc/bibliotecaudc/titulos/44000">https://elibro-net.accedys.udc.es/es/lc/bibliotecaudc/titulos/44000</a> Giménez Morera, A. Soler Orts, L. y Pascual Plá, B. (2016). Aplicación práctica de las matemáticas de operaciones financieras y la contabilidad. Editorial de la Universidad Politécnica de Valencia. <a href="https://elibro-net.accedys.udc.es/es/ereader/bibliotecaudc/57422">https://elibro-net.accedys.udc.es/es/ereader/bibliotecaudc/57422</a> Ramón Pintado, T. Lozano Gutiérrez, M. C. y Ramón Llorens, M. C. (2016). Ejercicios resueltos: matemática de las operaciones financieras. Conceptos básicos. Universidad Politécnica de Cartagena. <a href="https://elibro-net.accedys.udc.es/es/ereader/bibliotecaudc/44005">https://elibro-net.accedys.udc.es/es/ereader/bibliotecaudc/44005</a> Andrade López, J. C. (2017). Ejercicios resueltos de matemáticas financieras. Ecoe Ediciones. <a href="https://elibro-net.accedys.udc.es/es/ereader/bibliotecaudc/70494?page=15">https://elibro-net.accedys.udc.es/es/ereader/bibliotecaudc/70494?page=15</a> BIBLIOGRAFÍA ELECTRÓNICA (INGLÉS): Lozano Gutiérrez, M. C. y Ramón Llorens, M. C. (2017). Financial mathematics: fundamental concepts. Universidad Politécnica de Cartagena. <a href="https://elibro-net.accedys.udc.es/es/ereader/bibliotecaudc/44010">https://elibro-net.accedys.udc.es/es/ereader/bibliotecaudc/44010</a></p>
<p><b>Complementary</b></p>	<p>- Cabello González, J. M. (2006). Valoración financiera. Teoría y práctica con Excel. Madrid. Delta Publicaciones</p> <p>- Bravo Monroy, R. (2004). 4 Matemáticas financieras. Teoría y ejercicios. Editorial Centro de Estudios Ramón Areces</p> <p>- González Velasco, M. del C. (2007). Contabilidad Madrid. Editorial Ra-Ma Libro Subir González Velasco, M. del C. 2007 Análisis de las operaciones financieras (Core Syllabus for Actuarial Training in Europe). Pamplona. Editorial Aranzadi, S.A.</p> <p>- Pallerola Comamala, J. (2008). Matemática financiera para el nuevo Plan General de Contabilidad. Madrid. Editorial Ra-Ma</p> <p>- Bonilla Musoles, M., Ivars Escortell, A. y Moya Clemente, I. (2006). Matemática de la operaciones financieras. Teoría y práctica. Madrid. Ed. Thomson</p> <p>O texto de referencia para seguir o curso é o libro de Aguiar Maragoto e Martínez Fernández. O enderezo electrónico para acceder a ela facilitarase ao alumno o día da presentación da materia. O resto do material recomendado está accesible de forma virtual ou na biblioteca da facultade.</p>

## Recommendations

### Subjects that it is recommended to have taken before

Financial Accounting I/611G02013

### Subjects that are recommended to be taken simultaneously

### Subjects that continue the syllabus

Investment Theory/611G02020

Finance Theory/611G02021

### Other comments



(\*)The teaching guide is the document in which the URV publishes the information about all its courses. It is a public document and cannot be modified. Only in exceptional cases can it be revised by the competent agent or duly revised so that it is in line with current legislation.