



Teaching Guide				
Identifying Data				2017/18
Subject (*)	Information Systems for Business Financial Management	Code	611G02028	
Study programme	Grao en Administración e Dirección de Empresas			
Descriptors				
Cycle	Period	Year	Type	Credits
Graduate	2nd four-month period	Third	Obligatoria	6
Language	SpanishGalician			
Teaching method	Face-to-face			
Prerequisites				
Department	Empresa			
Coordinador	Aguiar Maragoto, Fernando	E-mail	fernando.aguiar@udc.es	
Lecturers	Aguiar Maragoto, Fernando Fernández Rodríguez, María Teresa López Pampín, José Carlos Martínez Fernández, Paulino Vizcaino Gonzalez, Marcos	E-mail	fernando.aguiar@udc.es m.fernandezr@udc.es c.lpampin@udc.es paulino.martinez@udc.es marcos.vizcaino@udc.es	
Web	udc.fernandoaguiar.es			
General description	Learn about the functions and components of the Business Information Systems from the point of view of a Graduate in Business Administration			

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.
A10	Read and communicate in a professional environment at a basic level in more than one language, particularly in English
A11	To analyze the problems of the firm based on management technical tools and professional criteria
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		
Know the role played by the Information Systems in the business organizations. Know also about the components of a Business System Information.	A1 A5 A6	B1 B2	C1 C4 C5
Know the lifecycle of a Business Information System and, more precisely, the role played by its users in the different steps of that lifecycle.	A11		C6 C7
Practical issues related with the IT applied to the Business Management.	A2 A3 A11	B3 B4	C1 C4 C6 C7
Know and learn the use of common BIE IT Tools, specifically studying those known as "office automation systems".	A2 A4 A6 A11	B7 B10	C1 C4 C6 C7 C8
Know, from a user point of view, the basic tools to design the data model and the procedures subsystem of a Business Information System.	A2 A4 A6 A8 A9 A10	B5 B8	C1 C4 C6 C7
Show a general view of the Business Information Systems legal framework.	A2 A4 A6 A9 A11	B6 B9	C1 C4 C6 C7

Contents	
Topic	Sub-topic
1. Introduction to the Business Information System.	1.1 The information as a resource in the business activity. 1.2. The Business Information System. Concept, activities and components. 1.3. The Business Information System and the Business Decision Making Levels. 1.4. The Business Information System and the Business Environment.



2. The Information System Lifecycle.	2.1. Introduction. 2.2. Steps of a information system lifecycle. 2.3. Analysis and design of a Business Information System. Concept, giving particular emphasis to its data model and its procedures.
3. Business Information Systems and IT.	3.1. Basic tools. 3.2. OAS tools. 3.3. Miscelaneous tools: design tools.
4. General view of other relevant issues in a Business Information System.	4.1. The Security in a Business Information System. 4.2. Other relevant issues. 4.3. New trends.
5. General View of the Spanish Business Information System Legal Framework.	5.1. Protection of personal data. 5.2. e-Signature. 5.3. Information Society Services. 5.4. Legal Protection of Software and databases.

Planning

Methodologies / tests	Competencies / Results	Teaching hours (in-person & virtual)	Student?s personal work hours	Total hours
Guest lecture / keynote speech	A1 A2 A3 A4 A5 A6 A8 A9 A10 A11 B2 B3 B4 B5 B6 C1 C4 C5 C6 C7 C8	17	34	51
Problem solving	A8 A9 A10 A11 B1 B7 B8 B9 B10	25	50	75
Seminar	A1 A2 A3 A4 A5 A6 A8 A9 A10 A11	4	0	4
Mixed objective/subjective test	A1 A2 A3 A4 A5 A6 A8 A9 A10 A11 C1 C4 C5 C6 C7 C8	2	16	18
Personalized attention		2	0	2

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

Methodologies

Methodologies	Description
Guest lecture / keynote speech	<p>1. Classroom lectures about the theoretical and practical contents of the subject to guide the student in its preparation.</p> <p>2. The time spent in each one of the subject chapters will be proportional to the difficulty level and to the length of those chapters. Thus, some chapters will take more time than others. The teacher is responsible of deciding how many time spend in each one of the subject chapters.</p> <p>3. For preparing those chapters with thw lowest level of difficulty, the student should study the bibliography, although in the lectures the student will be orientated about:</p> <p>a) which are the bibliographic sources to study</p> <p>b) which are the most relevant and interesting issues to reach the learning goals set for the subject.</p> <p>4. Discussion, together with all the workgroups, of the homework of each one of the workgroups. The student can participate:</p> <p>a) by his or her own, after being given the floor; b) after being required by the teacher to participate.</p>



Problem solving	<p>1. Development, exposition and resolution of practical exercises to be made by the student, being part of a workgroup, throughout the course.</p> <p>2. Exercises and readings to be made by the student by his or herself. In subsequent classes: a) a review of the exercises will be made. In this review, the student can participate as stated in the point 3. b) a question time about the readings will be opened.</p> <p>3. The student can participate: a) on his or her own, after being given the floor; b) after being required by the teacher to participate.</p>
Seminar	<p>Small group discussion of the subject contents. Specifically, the discussion of the exercises and readings described in the previous "Problem solving" statement.</p> <p>The student can participate: a) on his or her own, after being given the floor; b) after being required by the teacher to participate.</p>
Mixed objective/subjective test	<p>1. It consists in a theoretical-practical examination test about the subject contents, with short answer questions, long answer questions, practical cases questions, true-false questions, multiple answer questions or any combinations of these types.</p> <p>2. The examination test can be both oral or written. If, 48 hours in advance, nothing is stated in the subject webpage (Moodle), the examination test will be written.</p> <p>3. The examination test will take place in the dates, times and classrooms officially set by the Deanery.</p>

Personalized attention

Methodologies	Description
<p>Guest lecture / keynote speech</p> <p>Seminar</p> <p>Problem solving</p>	<p>1. In the guest lectures and keynote speeches the student can participate, after being given the floor, to ask, clarify or explain his or her point of view about the issues being dealt with in the moment of his participation.</p> <p>2. In the problem solving classes the student can participate as described in the Methodologies section.</p> <p>3. In the tutorials, the student can ask about the doubts arisen in the preparation of the subject. Although it is not compulsory, the student can ask about the doubts and the data and time -inside the tutorials schedule- in which he or she wants to be received, thus improving the tutorials effectiveness and management.</p> <p>4. If the questions dealt with in the tutorials are of a general interest, from the point of view of the teacher, they could be published in Moodle, together with their answers, to allow other students a better preparation of the subject. The name of the person who made the question will never be published.</p>

Assessment

Methodologies	Competencies / Results	Description	Qualification
Mixed objective/subjective test	A1 A2 A3 A4 A5 A6 A8 A9 A10 A11 C1 C4 C5 C6 C7 C8	<p>1. It is a unique examination test for each one of the qualification opportunities.</p> <p>2. This examination will follow those criteria stated in the Methodologies section.</p>	50



Problem solving	A8 A9 A10 A11 B1 B7 B8 B9 B10	<ol style="list-style-type: none"><li>1. Development of one or more practical use cases, set out by the teacher. In these use cases the students must develop some of the issues related to the contents of the subject. For example: designing a specific Information System or some of its parts, studying of a preexisting Information System and its implications in the business organization, particularly the organizative and legal implications.</li><li>2. The workgroups will consist of 4-6 students. Exceptionally the teacher can authorise a workgroup with less than 4 or more than 6 members.</li><li>3. It is essential for the assesment the discussion with the subject teacher or with the workgroup tutor of the practical cases assigned to the workgroup. This is why attending the follow-up meetings is also essential. Never a student could be qualified out of this context, without prejudice of the stated in points 4 and 5. These follow-up meetings will take place both in the guest lectures or keynote speechs, and in the seminars or even inside the problem solving methodology. Thus these three mothodologies will compute inside this 50% of the final qualification.</li><li>4. For the assesment of this problem solving methodology, the teacher will take into account: a) the work done in the workgroup; b) the discussion referenced in the point 3; c) the class attendance and the effective and active participation in the class; d) the examination tests, when applicable, referenced in point 5.</li><li>5. The continuous assesment tests are inside this methodology. These tests will be made, at the discretion of the teacher, to check and assess the progress of the student. These test can be both oral or written, with short answer questions, long answer questions, practical exercises, true-false questions, multiple answer questions or any combination of these types.</li><li>6. The works will be presented, discussed and assessed according to the schedule published in the subject webpage (Moodle).</li><li>7. Any doubt related with this section shoul be solved according to the continuous assessment criterion.</li></ol>	50
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Assessment comments



The assessment criteria are the same for each one of the assessment opportunities. This means that: 1) the qualification obtained in the "Problem solving" will be taken into account in both assessment opportunities; 2) the examination test related to the mixed objective/subjective test will be qualified on a 5 points basis (the 50% of the final qualification) in both assessment opportunities.

In the advanced summons, and only in this case, a mixed objective/subjective test will be made to assess every competence and content of the subject.

The qualification criteria of each one of the examination tests will be known at the time of the test and will be given with the test formulation.

Those tests that have been not made by the student will be qualified with a zero. The "Not presented" qualification will be given to a student that has participated in less than a 20% of the tests scoring for the final qualification. If a student commits a fraud in any of the tests, he or she will be qualified with a zero in the final qualification.

The only hardware allowed to access to the test classroom is that required to answer the examination test: pencil, ballpen or pen, rubber and a non-programmable electronic calculator.

It is expressly forbidden the access to the test classroom with: a) mobile phones and any other communication or information storage device; b) notes, books or every sort of material not expressly allowed in the examination test call or in the subject webpage (Moodle). Not accomplishing this rule will cause the test to be considered fraudulent, regardless of the effective use of these devices or materials during the length of the examination test.

The student should identify him or herself according to the current rules. For any other question not being dealt with along this guide, the official current rules will be applied.

## Sources of information

Basic	
	<ul style="list-style-type: none"><li>- Aguiar Maragoto, F.J.; Martínez Fernández, P y Vizcaíno González, M. (). Apuntes de Sistemas de Información. Página web de la asignatura. Moodle</li><li>- Piattini, M. G.; Calvo-Manzano, J. A.; Cervera, J. y Fernández, L. (). Análisis y diseño detallado de Aplicaciones Informáticas de Gestión. Ra_ma. Madrid</li><li>- Cardona, J. R.; Bueno Ávila, S. y Bañuls Silvera, V. A. (). Sistemas de Información Empresarial. Casos y supuestos prácticos. GEU</li><li>- Arjonilla Domínguez, S. J. y Medina Garrido. J. A (). La gestión de los sistemas de información en la empresa. Pirámide. Madrid</li><li>- Gómez Vieites, Á.y Suárez Rey, C. (2005). Sistemas de información. RA-MA. Madrid</li><li>- Kimmel, P. (2007). Manual de UML. Guía de aprendizaje. McGraw Hill. México</li><li>- Arlow, J. y Neustadt, I. (2006). UML 2. Anaya. Madrid</li><li>- Podeswa, H. (2010). UML. Anaya. Madrid</li><li>- Schmuller, J. (2000). Aprendiendo UML en 24 horas. Prentice Hall. México</li><li>- Links en Moodle (). Legislación relacionada con los Sistemas de Información empresarial.</li><li>- Silberschatz, A.; Korth, H. F. y Sudarshan (). Fundamentos de Bases de Datos. McGraw Hill. Madrid</li><li>- Grau Fernández, L. y López Rodríguez, I. (2001). Problemas de Bases de Datos. Sanz y Torres. Mdrid</li><li>- Almasri, R. y Navate, S. B. (). Sistemas de Bases de Datos. Conceptos fundamentales. Addison-Wesley. México</li><li>- O'Brien, J.A.; J.M. Marakas (2006). Sistemas de Información gerencial. Mexico: McGraw-Hill</li><li>- Davara Rodríguez, M. A. (1998). Manual de Derecho Informático. Madrid: Ed. THOMSON ? ARANZADI</li><li>- Edwards, C. et al (1998). Fundamentos de sistemas de información. Madrid: Prentice Hall</li><li>- Giner de la Fuente, F. (2004). Los sistemas de información en la sociedad del conocimiento. Madrid: ESIC</li><li>- Pablos Heredero, C. de et al (2006). Dirección y gestión de los sistemas de información en la empresa (una visión integradora). Madrid: ESIC</li><li>- Teaching Soft Group (2011). Excel 2010 : curso práctico. Madrid: RA-MA</li><li>- Menchén Peñuela, Antonio (2011). Tablas dinámicas en Excel 2010. Madrid: RA-MA</li><li>- Travería, Santiago (2011). Excel 2010 a fondo. Barcelona : Inforbook's</li><li>- Moreno Bonilla, Fernando (2010). Excel 2010 : modelos económicos y financieros. Madrid : Anaya Multimedia</li></ul>



<b>Complementary</b>	<ul style="list-style-type: none"><li>- Fernández Alarcón, V. (2010). Desarrollo de Sistemas de Información. Una metodología basada en el modelado. UPC. Barcelona</li><li>- Piattini Velthuis, M. G.; García Rubio, F. O.; García Rodríguez de Guzmán, I. y Pino, F. (2011). Calidad de los Sistemas de Información. RA-MA. Madrid</li><li>- Areito, J. (2008). Seguridad de la Información. Redes, informática y sistemas de información. Paraninfo. Madrid</li><li>- Piattini Velthuis, M.; Peso Navarro, E. del; y Peso Ruís, M del (2008). Auditoría de Tecnologías y Sistemas de Información. RA-MA. Madrid</li><li>- Gane, C. y Sarson, T. (1993). Análisis estructurado de sistemas. El Ateneo. Buenos Aires</li><li>- Debrauwer, L. y Van der Heyde, F. (2009). UML 2. Iniciación, ejemplos y ejercicios corregidos. ENI. Barcelona</li><li>- Debrauwer, L. y Karam, N. (2010). UML 2. Practique la modelización. ENI. Barcelona</li><li>- Yourdon, E. (1989). Análisis Estructurado Moderno. Prentice-Hall. México</li><li>- Alarcón, R. (2000). UML. Diseño orientado a objetos con UML. Eidos. Madrid</li><li>- Rumbaugh, J.; Jacobson, I. y Booch, G. (). El Lenguaje Unificado de Modelado. Manual de referencia. Addison Wesley</li><li>- Fowler, M. y Scott, K. (1997). UML gota a gota. Pearson. México</li></ul>
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### 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

Information Systems Design/611G02041

#### Other comments

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