



| Teaching Guide           |  |        |   |           |
|--------------------------|--|--------|---|-----------|
| Identifying Data         |  |        |   | 2023/24   |
| Subject (*)              | Management Information Systems   |        | Code  | 611507011 |
| Study programme          | Mestrado Universitario en Dirección e Administración de Empresas (2013)  |        |   |           |
| Descriptors              |  |        |   |           |
| Cycle                    | Period   | Year   | Type  | Credits   |
| Official Master's Degree | 2nd four-month period  | First  | Obligatory                                  | 6         |
| Language                 | SpanishGalician  |        |   |           |
| Teaching method          | Face-to-face   |        |   |           |
| Prerequisites            |  |        |   |           |
| Department               | Empresa  |        |   |           |
| Coordinador              | Fernández Rodríguez, María Teresa  | E-mail | m.fernandezr@udc.es                         |           |
| Lecturers                | Aranda Vasserot, Adolfo<br>Fernández Rodríguez, María Teresa   | E-mail | adolfo.aranda@udc.es<br>m.fernandezr@udc.es |           |
| Web                      | moodle.udc.es  |        |   |           |
| General description      | A materia pretende formar os coñecementos e desenvolver as competencias básicas relativas á aplicación das tecnoloxías da información e as comunicacións (TIC) nun contexto empresarial, adoptando unha perspectiva de xestión |        |   |           |

| Study programme competences |   |
|-----------------------------|---|
| Code                        | Study programme competences   |
| A1                          | CE01 - Asumir como profesional e cidadán a importancia da revisión crítica das actuacións sociais e ambientais das empresas.  |
| A2                          | CE02 - Comprender a incidencia da contorna na actividade empresarial: dispor de coñecementos adecuados para interpretar e elaborar estratexias de actuación social e ambiental da empresa.  |
| A7                          | Saber realizar un diagnóstico estratégico del sector en el que se encuentra ubicado la empresa u organización.  |
| A9                          | CE09 - Preparar informes económicos-financeiros que satisfagan as necesidades dos usuarios.   |
| A10                         | CE10 - Ler e interpretar estados financeiros.   |
| A11                         | CE11 - Deseñar estratexias corporativas, competitivas e políticas de empresas.  |
| A21                         | CE21 - Deseñar sistemas de información para a empresa.  |
| A22                         | CE22 - Manexar ferramentas informáticas para a xestión de empresas.   |
| B1                          | CB6 - Posuír e comprender coñecementos que acheguen unha base ou oportunidade de ser orixinais no desenvolvemento e/ou aplicación de ideas, a miúdo nun contexto de investigación   |
| B2                          | CB7 - Que os estudantes saibam aplicar os coñecementos adquiridos e a súa capacidade de resolución de problemas en contornas novas ou pouco coñecidos dentro de contextos más amplos (ou multidisciplinares) relacionados coa súa área de estudio   |
| B3                          | CB8 - Que os estudantes sexan capaces de integrar coñecementos e enfrentarse á complexidade de formular xuízos a partir dunha información que, sendo incompleta ou limitada, inclúa reflexións sobre as responsabilidades sociais e éticas vinculadas á aplicación dos seus coñecementos e xuízos |
| B4                          | CB9 - Que os estudantes saibam comunicar as súas conclusións e os coñecementos e razóns últimas que as sustentan a públicos especializados e non especializados dun modo claro e sen ambigüidades   |
| B6                          | CG1 - Organizar e planificar a xestión empresarial.   |
| B7                          | CG2 - Resolver problemas empresariais.  |
| B8                          | CG3 - Tomar decisións na empresa de forma efectiva.   |
| B9                          | CG4 - Compromiso ético na dirección empresarial.  |
| B10                         | CG5 - Aplicar coñecementos á xestión empresarial  |
| B11                         | CG6 - Aprender novas técnicas de dirección de empresas.   |
| B12                         | CG7 - Adaptarse a novas situacións e xerar novas ideas no mundo empresarial.  |
| B14                         | CG9 - Entender a importancia da cultura emprendedora.   |
| C1                          | CT01 - Saber manexar as fontes de información relevante e o seu contido   |
| C2                          | CT02 - Valorar críticamente o coñecemento e a tecnoloxía.   |
| C3                          | CT03 - Valorar a importancia da aprendizaxe ao longo de toda a carreira profesional.  |
| C4                          | CT04 - Traballar en equipo e desenvolver un espírito lóxico e creativo.   |



|     |  |
|-----|--|
| C5  | CT05 - Capacidad de análise e síntese  |
| C6  | CT06 - Comunicación oral e escrita.  |
| C7  | CT07 - Capacidad crítica.  |
| C8  | CT08 - Capacidad de liderado   |
| C9  | CT09 - Habilidade para traballar de forma autónoma.  |
| C10 | CT10 - Capacidad para comunicarse con expertos doutras áreas.  |
| C11 | CT11 - Utilizar as ferramentas básicas das tecnoloxías da información e as comunicacións (TIC) necesarias para o exercicio da súa profesión e para a aprendizaxe ao longo da súa vida. |

| Learning outcomes  | Learning outcomes   |  |     |
|--|---|--|-----|
|  | Study programme competences   |  |     |
| Comprende-lo papel das TIC nas organizacións empresariais            | AJ1<br>AJ2<br>AJ21<br>AJ22<br>BJ1<br>BJ2<br>BJ3<br>BJ4<br>BJ6<br>BJ7<br>BJ8<br>BJ9<br>BJ11<br>BJ12  | BJ1<br>BJ2<br>CJ4<br>CJ5<br>CJ7<br>CJ9<br>CJ10<br>CJ11 | CJ1 |
| Relaciona-las TIC coa competitividade e o desempeño empresarial      | AJ2<br>AJ7<br>AJ11<br>BJ1<br>BJ2<br>BJ3<br>BJ4<br>BJ6<br>BJ7<br>BJ8<br>BJ10<br>BJ11<br>BJ12<br>BJ14 | BJ1<br>BJ2<br>CJ2<br>CJ6                               | CJ1 |
| Comprende-la dinámica financeira dos investimentos intensivos en TIC | AJ9<br>AJ10<br>BJ3<br>BJ4<br>BJ6<br>BJ7<br>BJ8<br>BJ10  | BJ4<br>CJ2<br>CJ4<br>CJ5<br>CJ6<br>CJ7                 | CJ1 |
| Saber avaliar investimentos, proxectos ou empresas intensivas en TIC | AJ7<br>AJ9<br>AJ10<br>AJ21<br>BJ1<br>BJ2<br>BJ3<br>BJ4<br>BJ7<br>BJ8<br>BJ9<br>BJ10<br>BJ12<br>BJ14 | BJ2<br>CJ3<br>CJ5<br>CJ6<br>CJ11                       | CJ2 |



|   |              |   |
|---|--------------|---|
| Fomenta-lo interese e o sentido crítico en relación á innovación e ó progreso da tecnoloxía | BJ11<br>BJ12 | CJ1<br>CJ2<br>CJ3<br>CJ4<br>CJ5<br>CJ6<br>CJ7<br>CJ8<br>CJ9<br>CJ10<br>CJ11 |
|---|--------------|---|

| Contents                         |   |  |
|----------------------------------|---|--|
| Topic                            | Sub-topic   |  |
| Información e toma de decisiones | (I)rracionalidade<br>Datos, información e coñecemento   |  |
| O sistema de información         | Sistemas vs. tecnoloxías da información<br>As TIC en perspectiva histórica<br>A organización como un entramado de fluxos de información |  |
| A dimensión interna              | Procesamento de transaccións<br>Sistemas de xestión e para a toma de decisiones   |  |
| A dimensión externa              | Comercio electrónico<br>Cambios estruturais: nube, inteligencia de negocio, inteligencia artificial, analítica avanzada                 |  |
| Aspectos de xestión              | Avaliación de investimentos en TIC<br>Intanxibles e competitividade   |  |

| Planning                       |   |                      |                               |             |
|--------------------------------|---|----------------------|-------------------------------|-------------|
| Methodologies / tests          | Competencies  | Ordinary class hours | Student?s personal work hours | Total hours |
| Case study                     | A1 A2 A7 A9 A10 A11<br>A21 A22 B14 B12<br>B11 B10 B9 B8 B7 B6<br>B3 B2 C11 C10 C9<br>C8 C7 C6 C5 C4 C3<br>C2 C1 | 6                    | 12                            | 18          |
| Supervised projects            | A2 A9 B10 B11 B12<br>C2 C4 C6 C9 C10<br>C11   | 15                   | 52                            | 67          |
| Problem solving                | A7 A11 A21 A22 B1<br>B2 B3 B6 B7 C2 C3<br>C11   | 15                   | 30                            | 45          |
| Guest lecture / keynote speech | A2 A7 A9 A10 A11 B1<br>B2 B3 B4 B6 B7 B8<br>B14 C1 C2 C3  | 6                    | 12                            | 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 |



|                                |   |
|--------------------------------|---|
| Case study                     | Critical analysis of real cases. They will be practical activities through the use of information and communication technologies and spreadsheets. Discussion is sought in small groups of the contents.<br>The student can intervene: a) on their own initiative, after asking for a turn to speak; b) at the initiative of the teacher, who will expressly request the intervention of the student  |
| Supervised projects            | Medium-length tasks on specific topics or issues, related to information management and data processing, within the field of interest of the subject  |
| Problem solving                | 1. Preparation, presentation and solution of practical examples that the student, as part of a work group or individually, has to carry out throughout the course.<br><br>2. There will be exercises and/or readings to be done by the student in non-contact hours or autonomous work. In subsequent face-to-face hours, the following will be done:<br>a) a review of the exercises in which the student can intervene in the terms described in point 3 and b) of the readings, the corresponding question time will be opened in order to clarify those aspects that the student raises about the content of the same .<br><br>3. The student can intervene: a) on their own initiative, after asking for a turn to speak; b) at the initiative of the teacher, who will expressly request the intervention of the student. |
| Guest lecture / keynote speech | Session General presentation of work topics, and group coordination   |

| Personalized attention         |  |
|--------------------------------|--|
| Methodologies                  | Description  |
| Guest lecture / keynote speech | 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.  |
| Problem solving                | 2. In the problem solving classes and supervised projects the student can participate as described in the Methodologies section.   |
| Supervised projects            | 3. In the tutorials, the student (including those with partial attending or with attending exemption) 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.<br><br>4. If the questions dealt with in the individual 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 |

| Assessment    |   |   |               |
|---------------|---|---|---------------|
| Methodologies | Competencies  | Description   | Qualification |
| Case study    | A1 A2 A7 A9 A10 A11<br>A21 A22 B14 B12<br>B11 B10 B9 B8 B7 B6<br>B3 B2 C11 C10 C9<br>C8 C7 C6 C5 C4 C3<br>C2 C1 | The cases will consist of preparation, presentation and discussion of activities related to the specific contents of the subject at the proposal of the teachers 20 | 20            |



|                     |   |  |    |
|---------------------|---|--|----|
| Problem solving     | A7 A11 A21 A22 B1<br>B2 B3 B6 B7 C2 C3<br><br>C11   | The problems will consist of individual and/or group exercises using spreadsheets containing data related to business management and decision making.<br><br>It will be valued i) the degree of participation; ii) creativity and level of assertiveness; iii) the ability to diagnose the situations raised and make valuable contributions; iv) the quality of the proposed solutions; v) the content of the report or memory presented; and vi) the ability to support the conclusions with arguments based on the financial, organizational and competitive logic of the company.<br><br>In the case of group tasks, the qualification can be individualized according to these criteria.  | 40 |
| Supervised projects | A2 A9 B10 B11 B12<br><br>C2 C4 C6 C9 C10<br><br>C11 | Autonomous group work in which each group will choose a database that must contain qualitative and/or quantitative variables and will prepare a report in Word that will include the following sections:<br><br>- Characteristics of the chosen information system<br>- Structure of the information system<br>- Sources of information and type of data used<br>- Analysis and Visualization of data through spreadsheets, any Statistical tool or "Business Intelligence". The report will explain the steps followed to carry out the corresponding analysis and will be accompanied by the work files used.<br>- Decision making and conclusions<br><br>Additionally, each group will make a presentation and present the analysis and results obtained in the Team Project, including a reflection on the difficulties encountered (for example: inaccurate data, available information, purpose of the analysis, analytical skills) and the lessons learned.<br><br>The presentation of the work will be carried out and will have a maximum duration of 10 minutes. After the presentation, each team will have to answer the questions or clarifications raised by their classmates or the teacher.<br><br>All team members must participate in the oral presentation. | 40 |

## Assessment comments



## A) EVALUATION

### REGULATIONS:

#### Assessment conditions:

It is forbidden to access the exam room with any device that allows communication with the outside and / or storage of information. Cheating on the assessment tests or activities, once confirmed, will result in a failing grade (a 0, as numeric mark) in the corresponding convocatory and both in the first and in the second opportunities. If needed, the mark in the first opportunity act will be altered.

#### Student identification:

The student must prove her personality in accordance with current regulations.

## B) TYPES OF RATING:

### Qualification of not

presented: Corresponds to the student, when he only participates in evaluation activities that have a weighting of less than 20% on the final qualification, regardless of the qualification achieved.

### Students with

recognition of part-time dedication and academic waiver of attendance exemption:

Except for the dates approved in the Faculty Board for the final objective test, for the remaining tests a specific calendar of dates compatible with their dedication. For this reason, the student must contact the teacher of the subject in the first ten days of the semester in which the subject is taught, in order to set the aforementioned calendar. The tests will have the same format as for full-time students.

## C) ASSESSMENT

### OPPORTUNITIES:

#### 1. First opportunity:

The evaluation criteria previously indicated in this section will be applied.

#### 2. Second opportunity:

The evaluation criteria are the same as in the first opportunity.

#### 3. Early opportunity: It

will be evaluated through a mixed test that will account for 100% of the final grade.

## D) OTHER EVALUATION

### OBSERVATIONS:

#### 1. In general, without

prejudice to what is indicated for students with recognition of part-time dedication and academic exemption from attendance exemption, class attendance is required to qualify for the part of the grade corresponding to continuous evaluation, both first chance and second chance. At the end of the evaluation period corresponding to the first opportunity, students who have yet to pass the subject may be proposed activities that allow them to recover the part of the grade corresponding to the continuous evaluation for the second opportunity, which they must request to the teaching staff of the subject at least ten days before the date of the second chance exam.

#### 2. The scoring criteria

for each of the tests will be announced at the time of the test and will be supplied with the statement of the test



## Sources of information

|               |   |
|---------------|---|
| Basic         | <ul style="list-style-type: none"><li>- Gómez Vieites, A. (2009). Sistemas de información: herramientas prácticas para la gestión empresarial. Madrid: Ra-ma</li><li>- Cardona, J. (ed.) (2011). Sistemas de información empresarial: casos y supuestos prácticos. Granada: GEU</li><li>- Robson, W. (1994). Strategic management and information systems an integrated approach. Londres: Pitman</li><li>- Alter, S. (1996). Information Systems. A Management Perspective. Menlo Park, California: Benjamin Cummings</li><li>- O'Brien, J. (2006). Management information systems. Boston: McGraw - Hill</li><li>- Li, F. (1995). The geography of business information. Chichester: Wiley</li><li>- Andreu, R. (1996). Estrategia y sistemas de información. Madrid: McGraw - Hill</li><li>- Hirschheim, R. et al. (2002). Information systems outsourcing: enduring themes, emergent patterns, and future directions. New York: Springer Verlag</li></ul> <p>A busca e análise de fontes é unha das metodoloxías desenvolvidas durante o curso e un dos seus obxectivos formativos; neste sentido, a bibliografía aportada debe entenderse como unha reseña básica e xeral, que se completa con referencias específicas para cada capítulo.</p> |
| Complementary |   |

## Recommendations

Subjects that it is recommended to have taken before

Subjects that are recommended to be taken simultaneously

Subjects that continue the syllabus

Other comments

1. The delivery of the documentary works carried out in this subject:

It

will be requested in virtual format and / or computer support

It

will be done through Moodle, in digital format without the need to print  
it

2. The importance of ethical principles related to sustainability values

in personal and professional behavior must be taken into account.

3. Work will be done to identify and modify prejudices and sexist  
attitudes and the environment will be influenced to modify them and promote  
values of respect and equality. Actions to fix gender discrimination, when  
detected, will be proposed.

Según se recoge en las  
distintas normativas de aplicación para la docencia universitaria se deberá  
incorporar la perspectiva de género en esta materia. Se trabajará para  
identificar y modificar prejuicios y actitudes sexistas y se influirá en el  
entorno para modificarlos y fomentar valores de respeto e igualdad. Se deberán  
detectar situaciones de discriminación por razón de género y se propondrán  
acciones y medidas para corregirlas.

4. The full integration of students who, for physical, sensory,  
psychological or sociocultural reasons, experience difficulties to an adequate,  
equal and profitable access to university life will be facilitated.

(\*)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.