



## Teaching Guide

| Teaching Guide      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |        |          |                    |
|---------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|----------|--------------------|
| Identifying Data    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |        |          | 2017/18            |
| Subject (*)         | Industrial Logistics                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |        | Code     | 771G01045          |
| Study programme     | Grao en Enxeñaría de Deseño Industrial e Desenvolvemento do Produto                                                                                                                                                                                                                                                                                                                                                                                                                           |        |          |                    |
| Descriptors         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |        |          |                    |
| Cycle               | Period                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | Year   | Type     | Credits            |
| Graduate            | 2nd four-month period                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | Fourth | Optativa | 6                  |
| Language            | SpanishGalicianEnglish                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |        |          |                    |
| Teaching method     | Face-to-face                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |        |          |                    |
| Prerequisites       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |        |          |                    |
| Department          | EconomíaEmpresa                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |        |          |                    |
| Coordinador         | Dominguez Feijoo, Gerardo                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |        | E-mail   | g.dominguez@udc.es |
| Lecturers           | Dominguez Feijoo, Gerardo                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |        | E-mail   | g.dominguez@udc.es |
| Web                 | http://eudi.udc.es                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |        |          |                    |
| General description | This course complements the content of other materials that are directly or indirectly related to economics and business management of the design.                                                                                                                                                                                                                                                                                                                                            |        |          |                    |
|                     | The main objective of this is to provide the student with those skills needed on the role of logistics in the company to enable it to acquire a comprehensive view of policies and latest techniques unveiled face to manage the flow of information and materials in this. For that, they will present the basic principles of logistics; new logistics strategies that explain the evolution towards an integrated model between suppliers and customers; purchasing management, stocks ... |        |          |                    |

## Study programme competences

| Code | Study programme competences                                                                                                                                                                                                                            |
|------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| A1   | Aplicar o coñecemento das diferentes áreas involucradas no Plano Formativo.                                                                                                                                                                            |
| A4   | Traballar de forma efectiva como individuo e como membro de equipos diversos e multidisciplinares.                                                                                                                                                     |
| A8   | Capacidade de usar as técnicas, habilidades e ferramentas modernas para a práctica da enxeñaría.                                                                                                                                                       |
| A10  | Comprensión das responsabilidades éticas e sociais derivadas da súa actividade profesional.                                                                                                                                                            |
| B1   | Capacidade de comunicación oral e escrita de maneira efectiva con ética e responsabilidade social como cidadán e como profesional.                                                                                                                     |
| B2   | Aplicar un pensamento crítico, lóxico e creativo para cuestionar a realidade, buscar e propoñer solucións innovadoras a nivel formal, funcional e técnico.                                                                                             |
| B4   | Traballar de forma colaborativa. Coñecer as dinámicas de grupo e o traballo en equipo.                                                                                                                                                                 |
| B5   | Resolver problemas de forma efectiva.                                                                                                                                                                                                                  |
| B7   | Capacidade de liderado e para a toma de decisións.                                                                                                                                                                                                     |
| B10  | Capacidade de organización e planificación.                                                                                                                                                                                                            |
| B12  | Comprensión das responsabilidades éticas e sociais derivadas da súa actividade profesional                                                                                                                                                             |
| C4   | Desenvolverse para o exercicio dunha cidadanía aberta, culta, crítica, comprometida, democrática e solidaria, capaz de analizar a realidade, diagnosticar problemas, formular e implantar solucións baseadas no coñecemento e orientadas ao ben común. |
| C5   | Entender a importancia da cultura emprendedora e coñecer os medios ao alcance das persoas emprendedoras.                                                                                                                                               |
| C6   | Valorar criticamente o coñecemento, a tecnoloxía e a información dispoñible para resolver os problemas cos que deben enfrontarse.                                                                                                                      |
| C7   | Asumir como profesional e cidadán a importancia da aprendizaxe ao longo da vida.                                                                                                                                                                       |
| C8   | Valorar a importancia que ten a investigación, a innovación e o desenvolvemento tecnolóxico no avance socioeconómico e cultural da sociedade.                                                                                                          |

## Learning outcomes

| Learning outcomes | Study programme competences |
|-------------------|-----------------------------|
|-------------------|-----------------------------|



|                                                                                                                                                                                  |     |     |    |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|-----|----|
| Working collaboratively with the different areas of the company involved in the design process and product development, to manage the flow of materials and information on this. | A1  | B1  | C4 |
|                                                                                                                                                                                  | A4  | B2  | C5 |
|                                                                                                                                                                                  | A8  | B4  | C6 |
|                                                                                                                                                                                  | A10 | B5  | C7 |
|                                                                                                                                                                                  |     | B7  | C8 |
|                                                                                                                                                                                  |     | B10 |    |
|                                                                                                                                                                                  |     | B12 |    |

| Contents                                                      |                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|---------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Topic                                                         | Sub-topic                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| 1. Previous concepts about the company.                       | Definición de empresa. Funcións da empresa. Tipos de empresas. Organización interna dunha empresa. O proceso de dirección dunha empresa. A produtividade nunha empresa.                                                                                                                                                                                                                                                                      |
| 2. Previous concepts relating to logistics                    | O ámbito socioeconómico actual. Novos conceptos e novo enfoque. Evolución do concepto de loxística. A loxística no organigrama empresarial. A cadea ou rede loxística: os fluxos de materiais e produtos. Definición de loxística integral. Cadea de valor engadido. Os custos loxísticos.                                                                                                                                                   |
| 3. Sourcing and purchasing management                         | A función de aprovisionamento. A función de compras. Busca e selección de provedores. Control e avaliación de provedores. Negociación de compras.                                                                                                                                                                                                                                                                                            |
| 4. Rotation and coverage Stocks                               | Aspectos xerais da xestión de stocks. Clasificación operativa e funcional dos stocks. Concepto de rotación e cobertura. Cálculo da norma de stocks e tipos de stocks. Custos de stocks. Sistemas de reposición de stocks. Control de inventarios.                                                                                                                                                                                            |
| 5. organization and management of stock                       | Xestión de almacéns. Zonificación de almacéns. Automatización. Preparación de pedidos. Manipulación e elementos técnicos.                                                                                                                                                                                                                                                                                                                    |
| 6. Issuance and delivery of goods. Transportation management. | Distribución física e nivel de servizo: Distribución física. Unidades distribución. Planificación da distribución. Estratexias de distribución. Nivel de servizo. Tendencias de distribución. Programación de itinerarios e vehículos: Organización e transporte de mercadorías. Tipos de vehículos. Planificación de rutas. Programación de vehículos. Sistemas de carga e descarga. Control cadea de distribución. Custos de distribución. |
| 7. Just in Time                                               | Planificación xusto a tempo. Nivelado da produción. Sistema kaban. Redución de tempos de preparación e fabricación. Adaptación á demanda mediante flexibilidade. Control autónomo de defectos. Beneficios da implantación J.I.T.                                                                                                                                                                                                             |
| 8. Electronic commerce and logistics.                         | Sistemas de información. Redes e internet. Comercio electrónico e intranets. Novas oportunidades con tecnoloxía. Planificación de recursos empresariais (ERP). Tecnoloxías no tracking. Os sistemas RFID. O EDI. Principais elementos dun sitio electrónico de venda. Ciclo integral de abastecemento electrónico.                                                                                                                           |
| 9. Packaging                                                  | Definicións e funcións. Clasificación. Criterios de selección. Identificación. Deseño. Maquinaria empregada para envases e embalaxes.                                                                                                                                                                                                                                                                                                        |

| Planning                        |                               |                      |                               |             |
|---------------------------------|-------------------------------|----------------------|-------------------------------|-------------|
| Methodologies / tests           | Competencies                  | Ordinary class hours | Student's personal work hours | Total hours |
| Guest lecture / keynote speech  | A1 A10 B10 B12 C4<br>C5 C6 C7 | 41                   | 82                            | 123         |
| Supervised projects             | A4 B1 B2 B4 B7 C5<br>C8       | 0                    | 23                            | 23          |
| Mixed objective/subjective test | A8 B2 B5 C6                   | 1                    | 0                             | 1           |
| Personalized attention          |                               | 3                    | 0                             | 3           |

(\*)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  | Oral presentation of the contents of the field, complemented by the use of media and the introduction of some questions to the students, in order to impart knowledge and facilitate learning.                                                                                                                                                                                   |
| Supervised projects             | Methodology designed to promote independent learning of students, under the guidance of the teacher and in various scenarios (academic and professional). It is primarily referred to learning "how to do things." An option based on the assumption by students of responsibility for their own learning.<br>Students will complete the long course, mentored at least one job. |
| Mixed objective/subjective test | Objective test is to ask a question in the form of direct question the incomplete statement, and several answer options or alternatives that provide possible solutions, of which only one is valid.                                                                                                                                                                             |

## Personalized attention

| Methodologies                  | Description                                                                                                                                                                                  |
|--------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Guest lecture / keynote speech | Personal attention is basically the embodiment of tutorials, both individuals or in groups, to resolve and clarify any doubts regarding the matter and the embodiment of the protected work. |
| Supervised projects            |                                                                                                                                                                                              |

## Assessment

| Methodologies                   | Competencies         | Description                                                          | Qualification |
|---------------------------------|----------------------|----------------------------------------------------------------------|---------------|
| Mixed objective/subjective test | A8 B2 B5 C6          | Choice exam                                                          | 70            |
| Supervised projects             | A4 B1 B2 B4 B7 C5 C8 | Make a project in the course, to decide between teacher and students | 30            |
| Others                          |                      |                                                                      |               |

## Assessment comments

The ?Students with recognition of dedicación in time partial and metes out academic of exemption of assistance? will communicate to the start of the course his situation the professors of the subject, second establishes the "Norm that regulates the regime of dedicación to the study of the students of degree in the UDC? (Art.3.b And 4.5) and the ?Norms of evaluation, review and claim of the qualifications of the studies of degree and mestrado university? (Art. 3 and 8b).

The students in this situation will be asses in the date approved by the School, by means of join objective proof envelope the contents of the step 3 of the Guide, and a work to consensus with the professors of the subject.

## Sources of information

|               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|---------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Basic         | <ul style="list-style-type: none"> <li>- Ronald H. Ballou (2004). Logística. Administración de la cadena de suministro. .</li> <li>- Bureau Veritas formación (2011). Logística Integral. Fundación Confemetal</li> </ul> <p>MIT OpenCourseWare. Logistics Systems.<br/> <a href="http://ocw.mit.edu/courses/engineering-systems-division/esd-260j-logistics-systems-fall-2006/">http://ocw.mit.edu/courses/engineering-systems-division/esd-260j-logistics-systems-fall-2006/</a> (Visita: 31/08/2010).MIT OpenCourseWare. Logistics Systems.<br/> <a href="http://ocw.mit.edu/courses/engineering-systems-division/esd-260j-logistics-systems-fall-2006/">http://ocw.mit.edu/courses/engineering-systems-division/esd-260j-logistics-systems-fall-2006/</a> (Visita: 31/08/2010).</p> |
| Complementary |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |



| Recommendations                                          |
|----------------------------------------------------------|
| Subjects that it is recommended to have taken before     |
|                                                          |
| Subjects that are recommended to be taken simultaneously |
| Regulations and Legislation/771G01035                    |
| Subjects that continue the syllabus                      |
| Final Dissertation/771G01027                             |
| Economic and Business Aspects of Design/771G01033        |
| Quality Management/771G01044                             |
| 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.