



## Teaching Guide

| Identifying Data           |   |             |               |   | 2023/24 |
|----------------------------|---|-------------|---------------|---|---------|
| <b>Subject (*)</b>         | Fashion Supply Chain Management II: Operations Management                                   |             | <b>Code</b>   | 710G03017   |         |
| <b>Study programme</b>     | Grao en Xestión Industrial da Moda  |             |               |   |         |
| Descriptors                |   |             |               |   |         |
| <b>Cycle</b>               | <b>Period</b>   | <b>Year</b> | <b>Type</b>   | <b>Credits</b>  |         |
| Graduate                   | 2nd four-month period   | Second      | Obligatory    | 6   |         |
| <b>Language</b>            | English   |             |               |   |         |
| <b>Teaching method</b>     | Face-to-face  |             |               |   |         |
| <b>Prerequisites</b>       |   |             |               |   |         |
| <b>Department</b>          | Empresa   |             |               |   |         |
| <b>Coordinador</b>         | Garcia del Valle, Alejandro   |             | <b>E-mail</b> | alejandro.garcia.delvalle@udc.es                        |         |
| <b>Lecturers</b>           | Crespo Pereira, Diego<br>Garcia del Valle, Alejandro  |             | <b>E-mail</b> | diego.crespo@udc.es<br>alejandro.garcia.delvalle@udc.es |         |
| <b>Web</b>                 | <a href="https://humanidades.udc.es/estudos/gim">https://humanidades.udc.es/estudos/gim</a> |             |               |   |         |
| <b>General description</b> |   |             |               |   |         |

## Study programme competences

| Code | Study programme competences  |
|------|--|
| A3   | To develop competencies for interpersonal relations and interaction with external and internal stakeholders (customers, suppliers, media, partners?)   |
| A9   | To master the logistics process of a fashion firm from a global perspective, from procurement to manufacturing and transportation, with a special focus on the typical textile industry processes: selection of materials and fabrics, patternmaking, manufacturing, etc. ?                                      |
| A13  | To know the impact of technology on the different processes of the textile industry  |
| B1   | That students demonstrate that they acquired and understood knowledge in a study area that originates from general secondary education and that can be found at a level that, though usually supported by advanced textbooks, also includes aspects implying knowledge from the avantgarde of its field of study |
| B2   | That students know how to apply their knowledge to their job or vocation in a professional form, and have the competencies that are usually demonstrated through elaboration and advocacy of arguments and problem resolution within their field of study  |
| B3   | That students have the capacity to collect and interpret relevant data (normally within their field of study) in order to issue judgements that include a reflection upon relevant topics in the social, scientific or ethical realm   |
| B4   | That students may convey information, ideas, problems and solution to the public, both specialized and not   |
| B5   | That students develop those learning skills that are needed to undertake ulterior studies with a high degree of autonomy   |
| B8   | Capacity to plan, organize and manage resources and operations   |
| B9   | Capacity to analyse, diagnose and take decisions   |
| C2   | Mastering oral and written expression in a foreign language.   |
| C3   | Using ICT in working contexts and lifelong learning.   |
| C7   | Developing the ability to work in interdisciplinary or transdisciplinary teams in order to offer proposals that can contribute to a sustainable environmental, economic, political and social development.   |
| C8   | Valuing the importance of research, innovation and technological development for the socioeconomic and cultural progress of society.   |
| C9   | Ability to manage times and resources: developing plans, prioritizing activities, identifying critical points, establishing goals and accomplishing them.  |

## Learning outcomes

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



|   |                 |  |                      |
|---|-----------------|--|----------------------|
| To know the basic concepts of operations management                             | A3<br>A9<br>A13 | B1<br>B2<br>B3<br>B4<br>B5<br>B8<br>B9 | C2<br>C7<br>C8       |
| To know how to solve problems related to operations management                  | A9<br>A13       | B1<br>B2<br>B3<br>B4<br>B8<br>B9       | C3<br>C7<br>C9       |
| To become familiar with the technologies used in the operations management area | A3<br>A9<br>A13 | B2<br>B3<br>B8<br>B9                   | C2<br>C3<br>C8<br>C9 |

| Contents  |  |
|---|--|
| Topic   | Sub-topic  |
| Process design and capacity planning.           | Introduction to operations strategy. Productivity. Capacity and utilization. Long term capacity planning. Queuing models.                    |
| Quantitative methods for operations management. | Linear optimization. Non linear problems. Solver. Metaheuristics. Modelling and simulation.  |
| Inventory management.                           | Basic concepts. Types. ABC classification.   |
| Inventory costs.                                | Carrying costs. Ordering costs. Opportunity costs.   |
| Inventory models.                               | Methods based on the Economic Quantity Order. Safety stocks. Continuous and periodic review policies. Methods based on the Newsvendor model. |
| Project management.                             | Tasks. Resources. Costs.   |
| Schedulling.                                    | Single server schedulling. Parallel servers. Flow line schedulling. Priorities.  |
| Quality Management.                             | ISO 9001. Six sigma methodology.   |
| Lean Enterprise.                                | Just in Time. Lean manufacturing. Types of waste. Methods to avoid waste. 5S methodology.  |

| Planning                        |                                   |                      |                               |             |
|---------------------------------|-----------------------------------|----------------------|-------------------------------|-------------|
| Methodologies / tests           | Competencies                      | Ordinary class hours | Student?s personal work hours | Total hours |
| Guest lecture / keynote speech  | A9 A13 B1 B2 C3 C8                | 20                   | 10                            | 30          |
| Supervised projects             | A9 B2 B3 B4 B8 B9<br>C2 C7 C9     | 1                    | 36                            | 37          |
| ICT practicals                  | A9 A13 B1 B3 B4 B8<br>B9 C3 C8 C9 | 11                   | 18                            | 29          |
| Problem solving                 | A9 B3 B4 B8 B9 C3<br>C7 C9        | 8                    | 12                            | 20          |
| Mixed objective/subjective test | A3 A9 A13 B1 B2 B3<br>B5 B9 C2 C9 | 1                    | 19                            | 20          |
| Practical test:                 | A3 A9 A13 B1 B2 C3<br>C8          | 1                    | 10                            | 11          |
| 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  | Lectures on the content of this subject   |
| Supervised projects             | Projects to be done as proposed by the teachers                                     |
| ICT practicals                  | Solving practical problems with software (Excel, ProjectLibre, Flexsim, QuantumXL)  |
| Problem solving                 | Solving practical problems  |
| Mixed objective/subjective test | Exam on the contents of the subject   |
| Practical test:                 | Examen on the practical contents of the subject that will be solved using a laptop. |

## Personalized attention

| Methodologies       | Description   |
|---------------------|---|
| Supervised projects | During tutorial time, students can meet the teachers to clarify the doubts of the subject, as well as the ones concerning the supervised projects |

## Assessment

| Methodologies                   | Competencies                   | Description  | Qualification |
|---------------------------------|--------------------------------|--|---------------|
| Practical test:                 | A3 A9 A13 B1 B2 C3 C8          | Practical test using software  | 30            |
| Guest lecture / keynote speech  | A9 A13 B1 B2 C3 C8             | Attendance and active participation in the classes and seminars          | 5             |
| Supervised projects             | A9 B2 B3 B4 B8 B9 C2 C7 C9     | Assesment of the projects proposed by the teachers                       | 25            |
| ICT practicals                  | A9 A13 B1 B3 B4 B8 B9 C3 C8 C9 | Submission of cases solved in the classes or autonomously by the student | 10            |
| Mixed objective/subjective test | A3 A9 A13 B1 B2 B3 B5 B9 C2 C9 | Exam on the theoretical contents of the subject                          | 30            |

## Assessment comments



## Assessment criteria

### Second opportunity

The assessment criteria for the first and the second opportunity are the same. The student has a chance to resit the mixed objective/subjective test and the practical test. If the score in any of the two tests in the first opportunity was higher than 4.0, the student does not need to resit that test and its score can be kept for the second opportunity. However, the student cannot resit the supervised projects, guest lectures and ICT practicals because they are evaluated through continuous assessment.

### Early call

If there were students who wanted to take the early December call (Art. 19 "Standards for evaluation, review and claim of qualifications for undergraduate and master's degree studies"), those students will only have to take the mixed objective/subjective test (35% of the grade), the practical test (40% of the grade) and the supervised project (25% of the grade). The supervised project must be done individually.

As strict requirement to pass the course, both in the first and second opportunity of assessment, it will be necessary to obtain a minimum score of 3.5 points out of 10 in the mixed objective/subjective test and in the practical test. If this requirement is not met, the grade will be ?Fail? regardless of the average score.

### 'No Presentado' grade

The grade of "No presentado" (no grade) will be given to those students who will not attend the final exam both in the first, second opportunity of assessment as well as in the early call.

Students with recognition of part-time dedication and academic exemption waiver

The students with recognition of part-time dedication and academic exemption waiver must inform the instructor of the course at the beginning of the course, to establish a plan and calendar of activities. The assessment system will be the following one: mixed objective/subjective test (35%), practical test (30%), supervised project (25%), and the ICT Practicals (10%). The student must form a team with other students to develop the supervised project.

### Minimum grade

As strict requirement to pass the course, both in the first and second opportunity of assessment, it will be necessary to obtain a minimum score of 3.5 points out of 10 in the mixed objective/subjective test and in the practical test. If this requirement is not met, the grade will be ?Fail? regardless of the average score.

Students must attend at least to 80% of the classes. If this requirement is not met and the average score is 5.0 or higher, the grade will be 4.5 ?Fail?.

### Additional information



Fraudulent behaviour in any of the parts subject to assessment will result in the grade of "Fail (0)" in the final assessment.

It is forbidden to access the examination room with any device allowing for data transmission and/or warehousing when any of the evaluations is taking place (mobile phones, smartwatches...).



## Sources of information

|                      |   |
|----------------------|---|
| <b>Basic</b>         | <ul style="list-style-type: none"><li>- Collier, D.A., Evans, J.R. (2017). OM: Operations and supply chain management. Boston: Centage Learning</li><li>- Heizer, J., Render, B. (2013). Operations Management. Pearson</li><li>- Slack, Nigel; Chambers, Stuart; Johnston, Robert (2007). Operations Management. Pearson</li><li>- Verma, Boyer (2010). Operations &amp; Supply Chain Management. World class theory and practice.. Pearson</li><li>- Londrigan, Michael P. (2018). Fashion supply chain management. Bloomsbury Publishing Inc</li></ul> <p>O profesorado da materia proporcionará bibliografía específica para cada un dos temas.</p> |
| <b>Complementary</b> | <ul style="list-style-type: none"><li>- Heizer, J., Render, B. (2015). Dirección de la producción y de operaciones. Decisiones estratégicas. Prentice Hall</li><li>- Alessandra Vecchi (2017). Advanced Fashion Technology and Operations Management. Business Science Reference</li></ul>  |

## Recommendations

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

Fashion Supply Chain Management I: Procurement/710G03005

### Subjects that are recommended to be taken simultaneously

### Subjects that continue the syllabus

Fashion Supply Chain Management III: Logistics and Transportation/710G03019

### Other comments

In order to help in the achievement of a sustained immediate environment and meet the objective of action number 5: "Healthy and sustainable environmental and social teaching and research" of the "Green Campus Ferrol Action Plan", it will be encouraged, as far as possible, that the delivery of the documentary works in this subject was done in a virtual format and/or computer support, through Moodle and without the need to print them. If paper delivery is necessary, the following guidelines will be followed: Plastics will not be used Double-sided prints will be made Recycled paper will be used The printing of drafts will be avoided

(\*)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.