UNIVERSIDADE DA CORUÑA

Teaching Guide

Identifying Data				2023/24	
Subject (*)	Industrial Management		**Code**	730G03024	
Study programme	Grao en Enxeñaría Mecánica				

Descriptors					
Cycle	**Period**	**Year**	**Type**	**Credits**	
Graduate	1st four-month period	Third	Obligatory	6	
Language	Spanish				
Teaching method	Face-to-face				
Prerequisites					
Department	EconomíaEmpresa				
Coordinador	Crespo Pereira, Diego		**E-mail**	diego.crespo@udc.es	
Lecturers	Crespo Pereira, Diego		**E-mail**	diego.crespo@udc.es	
	Garcia del Valle, Alejandro			alejandro.garcia.delvalle@udc.es	
	Pernas Álvarez, Javier			javier.pernas2@udc.es	
Web	www.gii.udc.es				
General description	This course teaches Operations Management from the point of view of Industrial Engineering.				

Study programme competences	
Code	**Study programme competences**
A17	CR11 - Coñecementos aplicados de organización de empresas.
B2	CB02 - Que os estudantes saiban aplicar os seus coñecementos ao seu traballo ou vocación dunha forma profesional e posúan as competencias que adoitan demostrarse por medio da elaboración e defensa de argumentos e a resolución de problemas dentro da súa área de estudo
B3	CB03 - Que os estudantes teñan a capacidade de reunir e interpretar datos relevantes (normalmente dentro da súa área de estudo) para emitiren xuízos que inclúan unha reflexión sobre temas relevantes de índole social, científica ou ética
B4	CB04 - Que os estudantes poidan transmitir información, ideas, problemas e solucións a un público tanto especializado como leigo
B5	CB05 - Que os estudantes desenvolvan aquelas habilidades de aprendizaxe necesarias para emprenderen estudos posteriores cun alto grao de autonomía
B7	B5 - Ser capaz de realizar unha análise crítica, avaliación e síntese de ideas novas e complexas
C1	C3 - 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.
C4	C6 - Valorar criticamente o coñecemento, a tecnoloxía e a información dispoñíble para resolver os problemas cos que deben enfrontarse.
C6	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**	
Knowledge of operations management methods.	A17 B3 B4 B5 B7	B2 C1 C4 C6
Knowledge of manufacturing systems.	A17 B3 B4 B5 B7	B2 C1 C4 C6

Contents

Topic	Sub-topic
The following topics develop the contents established in the tab of the Verification Memory that are:	The Production System. Operations management. Planning, management and control.
1. Introduction	
2. Technical and economic analysis of decision alternatives	
3. Selection, design and process analysis	
4. Forecasting and demand planning	
5. Aggregate Production Planning	
6. Inventory Management	
7. LEAN and JIT Production	
8. Enterprise Resource Planning ERP	
9. Scheduling jobs	

Planning

Methodologies / tests	Competencies	Ordinary class hours	Student?s personal work hours	Total hours
Guest lecture / keynote speech	A17 B2 B3 B5	30	33	63
ICT practicals	B4 B7 C1 C4 C6	15	15	30
Supervised projects	A17 B2 B3 B4 B5 B7 C1 C4 C6	2	20	22
Problem solving	A17 B2 B3 B4 B5 B7 C1 C4 C6	13	13	26
Mixed objective/subjective test	A17 B2 B3 B4 B5 B7 C1 C4 C6	2	4	6
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 in large groups
ICT practicals	Classes in medium and small groups using ICT (Excel, FlexSim and other appropriate tools).
Supervised projects	Team based work proposed by the teacher at the beggining of the course.
Problem solving	Classes for solving problems using a computer.
Mixed objective/subjective test	Final exam

Personalized attention

Methodologies	Description
Guest lecture / keynote speech ICT practicals Mixed objective/subjective test Supervised projects Problem solving	Personal attention will be made in tutorial hours.

Assessment

Methodologies	Competencies	Description	Qualification
Mixed objective/subjective test	A17 B2 B3 B4 B5 B7 C1 C4 C6	Final exam.	70
Supervised projects	A17 B2 B3 B4 B5 B7 C1 C4 C6	Submission and presentation of a project proposed by the teacher.	30

Assessment comments

Assessment Criteria

Second Opportunity and Early Call

For students in both the first and second opportunity, the assessment will be conducted according to the relative weight indicated in the methodology table, as well as for students in the early call.

A student who has submitted and passed the supervised projects but has not passed the course may retain the grade for the supervised projects only in the immediately following academic year. The student may choose to repeat the work, which must be communicated to the course instructors at the beginning of the academic year.

Grade "Not Present"

The "No Presentado" ("Not Present") grade will be given to students who do not attend the final exam scheduled on the date established in the official school examination calendar. This criterion applies to both the first and second opportunities for evaluation, as well as the early call.

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

Students with recognition of part-time dedication and academic exemption waiver will inform the course instructors of their situation at the beginning of the course, as established in the "orma que regula el régimen de dedicación al estudio de los estudiantes de grado en la UDC" (Art. 3.b and 4.5) and the "Normas de evaluación, revisión y reclamación de las calificaciones de los estudios de grado y máster universitario" (Art. 3 and 8b).

The evaluation system for students with recognition of part-time dedication and academic exemption waiver is as follows:

Mixed objective/subjective test (70%) and Supervised projects (30%).

Additional Information

According to Article 11, section 4 b) of the "Reglamento disciplinar del estudiantado de la UDC", engaging in fraudulent behavior in any of the methodologies subject to assessment sections will result in a grade of "Fail (0)" for the final evaluation, both in the first and second opportunity, regardless of the opportunity in which the offense was committed.It is forbidden to access the examination room with any device allowing for data transmission and/or warehousing (e.g., mobile phones, smart watches...) when any of the assessment test is taking place.

Sources of information

Basic	- Collier, David Alan; Evans, James R. (). OM4. CENGAGE Learning
	- Heizer, Jay and Render, Barry (). Operations Management. Prentice Hall
	- Slack, Nigel; Chambers, Stuart; Johnston, Robert (). Operations Management. Prentice Hall
	- García del Valle, Alejandro; Lamas, Adolfo; Crespo, Diego (). Apuntes de Organización de Empresas. Moodle
Complementary	- Greasley, Andrew (2009). Operations Management. John Wiley
	- Askin, Ronald G and Jeffrey, B. Goldberg (2002). Desing and Analysis of Lean Production Systems. John Wiley

Recommendations

Subjects that it is recommended to have taken before

Statistics/730G03008

Business Management/730G03010

Subjects that are recommended to be taken simultaneously

Subjects that continue the syllabus

Other comments
There is an extensive literature on Operations Management in the library of the Polytechnic School (mostly in English).The chapters of the course are available as PDF documents in Moodle. Exams and solutions of previous years are available in Moodle.

(*)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.