SUBJECT TEACHING GUIDE

G743 - Industrial Production and Organisation

Degree in Mechanical Engineering

Academic year 2016-2017

1. IDENTIFYING DATA					
Degree	Degree in Mechanical Engineering			Type and Year	Compulsory. Year 2
Faculty	School of Industrial Engineering and Telecommunications				
Discipline	Second Year Subjects Subject Area: Industrial Organisation and Production Module in Common with the Industrial Branch				
Course unit title and code	G743 - Industrial Production and Organisation				
Number of ECTS credits allocated	6	Term	Semester based (2)		
Web					
Language of instruction	Spanish	English Friendly	No	Mode of delivery	Face-to-face

Department	DPTO. TRANSPORTES Y TECNOLOGIA DE PROYECTOS Y PROCESOS
Name of lecturer	JOSE PEDRO VERON GUEMBE
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Other lecturers	JULIAN MUÑOZ MARQUE IGNACIO JOSE AMBROSIO DIAZ

3.1 LEARNING OUTCOMES
- The purpose of the course is to teach the student the principal manufacturing technologies and methods applied in Industrial Organization.

4. OBJECTIVES

Generic knowledge of manufacturing engineering and systems and manufacturing processes and its location in the productive frame.
Capacity to characterize and understand the different elements involved in the manufacturing processes .
Knowledge about scientific and technical bases of manufacturing processes.
Knowledge about machine-tools, tools and tooling of the main manufacturing processes.
Regarding the content of the Subject under the profile of Administration of Companies , the students know the criteria and the tools in order to perform an economic and financial diagnosis of the company and develop actions that allow the improvement of the competitiveness. Regarding the content of the Subject under the profile of Production Management, the students must know the criteria and the tools of Lean Procurement in order to obtain the balance load-capacity.

6. COURSE ORGANIZATION

	CONTENTS
1	Mechanical components manufacturing processes. - Introduction
2	Machining technologies. -Tools and their lifes. Cutting forces and power. Cutting fluids. Cutting regimes and fabrication.
3	Machine-tools. - Programming and control. Geometry process. Milling machine, lathe, Broaching, Drilling ... etc.
4	Production Management. Quality.
5	Stocks Management.
6	Aggregated Planning.
7	Short and medium term operations planning. MRP, JIT.
8	Production Control.

7. ASSESSMENT METHODS AND CRITERIA

Description	Type	Final Eval.	Reassessn	%
Exam 1	Written exam	No	Yes	33,34
Exam 2	Written exam	No	Yes	33,33
Exam 3	Written exam	No	Yes	30,00
Others	Others	No	No	3,33
TOTAL				100,00

Observations

Observations for part-time students

8. BIBLIOGRAPHY AND TEACHING MATERIALS

BASIC

Bloques 1, 2 y 3:
El mecanizado moderno-Sandvik Coromat
Tecnología de fabricacion - Henar Miguelez y Cantero.
Metals Handbook - American Society for Metals.
Manual CNC
Apuntes - Muñoz Marque

Bloques del 4 al 8.
Análisis del Balance: Editorial Deusto.
Aspectos Tácticos de la Planificación de Operaciones (Tomo II): Autor: Machuca.
Heyzer, J. y Render, B. “DIRECCIÓN DE LA PRODUCCIÓN Y DE OPERACIONES. DECISIONES TÁCTICAS”. Ediciones Pearson. Madrid. 8ª Edición. 2007. ISBN: 9788483223611
Heyzer, J. y Render, B. “DIRECCIÓN DE LA PRODUCCIÓN Y DE OPERACIONES. DECISIONES ESTRATÉGICAS”. Ediciones Pearson. Madrid. 8ª Edición. 2007. ISBN: 9788483223604