



Universitat de Lleida

DEGREE CURRICULUM **PRODUCTION MANAGEMENT**

Coordination: FALGUERA PASCUAL, VICTOR

Academic year 2022-23

Subject's general information

Subject name	PRODUCTION MANAGEMENT			
Code	102240			
Semester	1st Q(SEMESTER) CONTINUED EVALUATION			
Typology	Degree	Course	Character	Modality
	Bachelor's Degree in Food Science and Technology	4	COMPULSORY	Attendance-based
Course number of credits (ECTS)	6			
Type of activity, credits, and groups	Activity type	PRAULA		TEORIA
	Number of credits	2		4
	Number of groups	1		1
Coordination	FALGUERA PASCUAL, VICTOR			
Department	FOOD TECHNOLOGY, ENGINEERING AND SCIENCE			
Teaching load distribution between lectures and independent student work	Presential hours: 60 Non-presential hours: 90			
Important information on data processing	Consult this link for more information.			
Language	Catalan: 80% Spanish: 20%			

Teaching staff	E-mail addresses	Credits taught by teacher	Office and hour of attention
ELEZ MARTINEZ, PEDRO	pedro.elez@udl.cat	1	
FALGUERA PASCUAL, VICTOR	victor.falguera@udl.cat	4	
ISLA LLANES, ALFREDO	alfred.isla@udl.cat	1	

Subject's extra information

The subject is organized in four blocks:

- Block A. Planning and management of production.
- Block B. Efficient management of resources.
- Block C. Management of by-products and waste.
- Block D. Management of innovation in the food industry.

Learning objectives

The student, passing the subject, should be able to:

- Describe the environment for innovation in the food sector.
- Plan activities with innovation in food business.
- To plan the production of food industry
- Know the main strategies for energy optimization for food industry
- Manage food products
- Know the treatment of waste in the food industry

Competences

General skills

We guarantee at least the following basic skills:

CG1: Students should possess demonstrated knowledge and understanding of the basis of general secondary education at a level that, while it is supported by advanced textbooks, includes some aspects that involve knowledge from the forefront of this area .

CG2: Students can apply their knowledge to their work or vocation in a professional manner and have competences typically demonstrated by preparing and defending arguments and solving problems within their area of study.

CG3: Students have the ability to gather and interpret relevant data to make judgments that include reflection on relevant issues of social, scientific or ethical.

CG4: That students can communicate information, ideas, problems and solutions to both specialist and non-specialist.

CG5: Students have developed those learning skills necessary to undertake further studies with a high degree of autonomy.

In addition, the graduate should be able to:

CG6: Analyze specific situations, defining problems, make decisions and implement plans of action in finding solutions.

CG7: Interpret studies, reports, data and analyze them numerically.

CG8: Select and push the sources of written and computerized information available related to professional activities.

CG9: Use tools and communication available to support the development of their professional (strategic competition UDL)

CG10: Working alone and in multidisciplinary team.

CG11: Understand and express themselves in appropriate terminology.

CG12: Presenting information correctly orally and in writing (strategic competition UDL)

CG13: To discuss and argue on various forums.

CG14 Communicating and master a foreign language (strategic competition UDL)

CG15: Recycling in the new technological advances through continuous learning.

CG16: Assess comprehensive training, motivation and personal mobility.

CG17: Analyze and evaluate the social and ethical implications of professional activity. CG18: Having a critical and innovative spirit.

CG19: Analyze and assess the environmental implications of their professional activity.

CG20: respect the fundamental rights of equality between men and women, the promotion of human rights and the values ??of a culture of peace and democratic values.

Specific skills

Graduates in Food Science and Technology after completing their studies will have acquired the following knowledge and skills:

Management and Quality in the food industry

CE44: Develop a plan and manage production processes food.

CE45: Establish ways to manage the quality control of products at different stages of the production process.

CE46: Organise management products and waste in the food industry.

CE47: Identify, analyze and solve environmental problems generated by the food industry.

CE54: Carry out market research on food products, and product innovation

Subject contents

A. Production Management

1. **The production management.** Presentation. The concept of production. Strategic management.
2. **Product.** Product concept. Product selection. The election process of new products.
3. **The capacity of the production plant.** Classes capacity. Classes production processes. Determining the future needs of capacity.
4. **Distribution of the plant.** The distribution of the plant. Factors affecting the distribution of the plant. Classes distribution plant.
5. **The project management.** Definition of a project. Components of a project. Definition of project management. The organization of the company and other influences. The process of project management.
- 6.

B. Management products and waste

7. **Introduction to the management of waste and by-products in the food industry.** Definitions in the EU. Classification. Characterization of the main waste and byproducts of the food industry. Major roads reuse.
8. **Using products of vegetable origin.** By-products from processing plants. Recovery of functional groups.
9. **Use of products of animal origin.** Definition of products of animal origin. Characterization and roads reuse.
10. **Using products of the fishing industry.** Main products of processed fishery. Uses of products.
11. **Anaerobic digestion of organic waste.** Principles of anaerobic digestion. Microbial anaerobic treatment of organic matter. Benefits and limits of co-digestion.
12. **ISO 14000: Environmental Management System.** Family rules. Benefits. Relationship with ISO 9001.

C. Innovation in the food industry.

13. **Introduction to innovation.** Definition and concept innovation. Classification of innovations. Advantages of innovation. Key factors for innovation. Innovation systems.
14. **Innovation Management.** Strategic dimension of innovation. Identification of innovative ideas. Innovation development projects. Operational results of and nnovació.
15. **Innovation in the food industry.** Innovation in product. Innovation process. Innovation in marketing.

Methodology

Type of activity	Overview	Student classroom activity		Student learning activity		Evaluation	Total Time	
		Goals	Hours	Working student	Hours	Hours	Hours	ECTS

Lectures	Lectures (classroom. Large group)	Explanation of the main concepts	38	Study: Know, understand and synthesize knowledge	68	6	112	4.5
Problems and cases	Class participation (Aula. Large group)	Troubleshooting and case	12	Learning to solve problems and cases	18		30	1.2
Seminar	Class participation (Intermediate)	Activities for discussion or application	4	Solve problems and cases. Discuss	4		8	0.3
Laboratory	Laboratory Practice (Intermediate)	Implementation of the practice: understanding phenomena, measure ...		Study and Perform memory				
Classroom computing	Practice computer classroom (Intermediate)	Implementation of the practice: understanding phenomena, measure ...		Study and Perform memory				
Fieldwork	Practice field (Intermediate)	Implementation of the practice: understanding phenomena, measure ...		Study and Perform memory				
Views	Visit farms or industries	Performing visit		Study and Perform memory				
Guided	Student work (individual or group)	Orient the student work (hours of tutorials)		Conduct a bibliographic work, study, etc.				
Other								
Totals			54		84	6	150	6.0

Evaluation

1st test (blocks B and D) - 34%

2nd test (blocks A and C) - 56%

Coursework and discussion - 10%

Minimum required grade for each block: 5/10. Delivering and defending the coursework is mandatory for approval.

Type of activity	Activity Assessment		Weight rating
	Procedure	Numero	(%)

Lectures	Exams on theory syllabus	2	90
Problems and cases	Deliveries or written evidence on issues and cases	1	10
Total			100

Bibliography

Albiol, R.; Ferràs, X.; Palmer, J. (2002). Gestió de projectes. Centred'Innovació i Desenvolupament Empresarial (CIDEM). Generalitat de Catalunya. Disponible online: http://xarxanet.org/sites/default/files/cidem_-_gestio_projectes.pdf

Osterwalder, A; Pigneur, Y. (2010). Business Model Generation: A Handbook for Visionaries, Game Changers, and Challengers. Wiley.

Escorsa i Castells, P. (2003). Tecnología e innovación en la empresa. Edicions UPC. Barcelona. Velasco Balmaseda, E. (2010). Gestión de la innovación: elementos integrantes y su aplicación en empresas innovadoras del País Vasco. Universidad del País Vasco.

Oreopoulou, V.; Russ, W. (eds.) (2007) Utilization of By-Products and Treatment of Waste in the Food Industry. Springer.

De Meyer, A. , Wittenberg, A. 1994. "Nuevo enfoque de la función de la producción". Ed. Folio S.A. Barcelona.

Laañeta, J. 1995. "Métodos modernos de gestión de la producción". Ed. Alianza. Madrid. *Molina, G.* 1985. "Manual de la eficiencia energética eléctrica en la industria" CADEM. Bilbao. *Merino, J.Mª.* 1991. "Manual de la eficiencia energética en instalaciones de bombeo". CADEM. Bilbao.

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