

[MLB002] Advanced production concepts

GENERAL INFORMATION

Studies	UNIVERSITY MASTER'S DEGREE IN PRODUCTIVE LOGISTICS OPERATIONS MANAGEMENT	Subject	The main functions of the supply chain
Semester	1	Course	1
Character	COMPULSORY	Mention / Field of specialisation	
Plan	2022	Modality	Face-to-face
Credits	4,5	Language	CASTELLANO
		Total hours	40 class hours + 72.5 non-class hours = 112.5 total hours

PROFESSORS

ORUE IRASUEGUI, AITOR

REQUIRED PREVIOUS KNOWLEDGE

Subjects	Knowledge
(No specific previous subjects required)	(No previous knowledge required)

LEARNING RESULTS

LEARNING RESULTS	KC	SK	AB	ECTS
MLR081 - Distinguishes the different contexts, types of plant, types of production and their characteristics and limitations in real contexts		x		3,9
MLR301 - Works in multidisciplinary teams, without distinction, with a cooperative and participative attitude and efficiently communicates the results obtained orally and in writing in different languages. Without any limitation of accessibility to achieve the established objectives.	x		x	0,3
MLR302 - Understands the impact of their profession on the environment in order to practice with social responsibility	x			0,3
Total:				4,5

KC: Knowledge or Content / SK: Skills / AB: Abilities

SECONDARY LEARNING RESULTS

RML113 [!] *Distingue los diferentes contextos, tipos de planta, tipos de producción y sus características y limitaciones en contextos reales*

LEARNING ACTIVITIES

	CH	NCH	TH
Development and writing of records, reports, presentations, audiovisual material, etc. on projects/work experience/challenges/case studies/experimental investigations carried out individually and/or in teams		10 h.	10 h.
Conducting tests, giving presentations, presenting defences, taking examinations and/or doing checkpoints	10,5 h.	12,5 h.	23 h.
Carrying out/resolving projects/challenges/cases, etc. to provide solutions to problems in interdisciplinary contexts, real and/or simulated, individually and/or in teams		18 h.	18 h.
Presentation by the teacher in the classroom, in participatory classes, of concepts and procedures associated with the subjects	25,5 h.	12 h.	37,5 h.
Practical work in workshops and/or laboratories, individually and/or in teams	4 h.	5 h.	9 h.

EVALUATION SYSTEM

	W
Reports on the completion of exercises, case studies, computer exercises, simulation exercises, laboratory exercises, term projects, challenges and problems	24%
Presentation and defence of exercises, case studies, computer practical work, simulation practical work, laboratory practical work, term projects, end of degree project, master's thesis, challenges and problems	36%
Individual written and/or oral tests or individual coding/programming tests	40%

MAKE-UP MECHANISMS

Reports on the completion of exercises, case studies, computer exercises, simulation exercises, laboratory exercises, term projects, challenges and problems
Presentation and defence of exercises, case studies, computer practical work, simulation practical work, laboratory practical work, term projects, end of degree project, master's thesis, challenges and problems
Individual written and/or oral tests or individual coding/programming tests

CH - Class hours: 40 h.

NCH - Non-class hours: 57,5 h.

TH - Total hours: 97,5 h.

RML301 [!] *Trabaja en equipos multidisciplinares, sin distinción ninguna, con actitud cooperativa, participativa y comunica eficiente los resultados obtenidos de forma oral y escrita en distintos idiomas. Sin ninguna limitación de accesibilidad para alcanzar lo*

LEARNING ACTIVITIES

CH

NCH

TH

Development and writing of records, reports, presentations, audiovisual material, etc. on projects/work experience/challenges/case studies/experimental investigations carried out individually and/or in teams

7,5 h.

7,5 h.

EVALUATION SYSTEM

W

MAKE-UP MECHANISMS

Reports on the completion of exercises, case studies, computer exercises, simulation exercises, laboratory exercises, term projects, challenges and problems

50%

(No mechanisms)

Presentation and defence of exercises, case studies, computer practical work, simulation practical work, laboratory practical work, term projects, end of degree project, master's thesis, challenges and problems

50%

CH - Class hours: 0 h.

NCH - Non-class hours: 7,5 h.

TH - Total hours: 7,5 h.

RML302 [!] *Entiende el impacto de su profesión en el entorno para ejercer con responsabilidad social*

LEARNING ACTIVITIES

CH

NCH

TH

Development and writing of records, reports, presentations, audiovisual material, etc. on projects/work experience/challenges/case studies/experimental investigations carried out individually and/or in teams

7,5 h.

7,5 h.

EVALUATION SYSTEM

W

MAKE-UP MECHANISMS

Presentation and defence of exercises, case studies, computer practical work, simulation practical work, laboratory practical work, term projects, end of degree project, master's thesis, challenges and problems

100%

(No mechanisms)

CH - Class hours: 0 h.

NCH - Non-class hours: 7,5 h.

TH - Total hours: 7,5 h.

CONTENTS

LEARNING RESOURCES AND BIBLIOGRAPHY

Learning resources

Technical articles
Topic related web quires
Moodle Platform
Class presentations
Video projections
Specific Master Software
Slides of the subject

Bibliography

Goldratt, E. M., & Cox, J. F. (1984). The goal: Excellence in manufacturing. North River Press Umble, M., and Srikanth, M. L., (1995) Synchronous manufacturing: principles for world-class excellence. Spectrum Publishing
Goldratt, E. M. (1997). Critical chain. Great Barrington, MA: North River Press
Cox III, J. F., & Spencer, M. S. (1997). The constraints management handbook. CRC Press
Goldratt, E. M., & Gibler, N. A. (1999). El síndrome del pajar: cómo extraer información del océano de datos
Smith, D. (2000). The Measurement Nightmare, How the Theory of Constraints can Resolve Conflicting Strategies. Policies and Measurements St Lucie Press/APICS Series on Constraints Management
Cox, J., III & Schleier, J. (2010). Theory of constraints handbook,

New York, McGraw Hill Professional

Hopp, W. J., & Spearman, M. L. (2011). Factory physics. Waveland Press

Cox III, J.F., Boyd, L.H., Sullivan, T.T., Reid, R.A., and Cartier, B., (2012) The TOCICO Dictionary (Second Edition). McGraw-Hill Education

Heizer, J., Render, B., & Parra, J. L. M. (2015). Dirección de la producción y de operaciones: decisiones estratégicas

Ptak, C. & Smith, C. (2016). Demand Driven Material Requirements Planning (DDMRP), Industrial Press

Project Management Institute (2017). A guide to the project management body of knowledge (PMBOK guide) (6th Edition). Project Management Institute, Inc

Ptak, C. & Smith, C. (2017). Precisely wrong: Why conventional planning systems fail. South Norwalk, CT: Industrial press, Inc

Ptak, C. & Smith, C. (2018). The Demand Driven Adaptive Enterprise. South Norwalk, CT: Industrial press, Inc

Pittman, P.H., and Atwater, J.B. (2019) The APICS Dictionary, 16th edition. American Production and Inventory Control Society