

**COURSE DATA****Data Subject**

<b>Code</b>	44617
<b>Name</b>	Organisation and management of a chemical company
<b>Cycle</b>	Master's degree
<b>ECTS Credits</b>	5.0
<b>Academic year</b>	2017 - 2018

**Study (s)**

<b>Degree</b>	<b>Center</b>	<b>Acad. Period</b>
2218 - M.U. en Química	Faculty of Chemistry	1 First term

**Subject-matter**

<b>Degree</b>	<b>Subject-matter</b>	<b>Character</b>
2218 - M.U. en Química	11 - Organisation and management of a chemical company	Optional

**Coordination**

<b>Name</b>	<b>Department</b>
COBOS CABALLERO, ANGELA	105 - Business Administration 'Juan José Renau Piqueras'

**SUMMARY**

The subject "Organization and management in the chemical company ", of 5 credits ECTS, tries to introduce the student in basic contents of the exercise of the managerial function. Complementing other subjects of the title, it centers on functional areas not treated in other paragraphs. The contents are arranged in 4 modules: managerial skills and team management; quality management; management of the processes of innovation; and management of the processes of production and logistics. We approach this way the management of the functions that more projection and relevancy have in a managerial project of the profile that can be developed by students of the master who decide to take it forward.



## PREVIOUS KNOWLEDGE

### Relationship to other subjects of the same degree

There are no specified enrollment restrictions with other subjects of the curriculum.

### Other requirements

## OUTCOMES

### 2218 - M.U. en Química

- Students should be able to integrate knowledge and address the complexity of making informed judgments based on incomplete or limited information, including reflections on the social and ethical responsibilities associated with the application of their knowledge and judgments.
- Be able to solve complex chemistry problems, whether in the academic, research or industrial application areas at a specialization or masters-level.
- Possess the necessary skills to develop multidisciplinary activities within the field of chemistry at the master's level.
- Be able to design, perform, analyse and interpret experiences and complex data in the environment of chemistry at a specialization level.
- Acquire advanced knowledge to assess the importance of chemistry in health, the environment, new materials and energy.
- Acquire the necessary advanced knowledge to assess the importance of chemistry in economic and social development in a context of specialization.

## LEARNING OUTCOMES

Demonstrate knowledge of the management and organization of a business project in the field of chemical company or chemical industry, identifying the main fields of work and the appropriate orientation in each of them.

Know the importance and integrate the most appropriate theoretical considerations in the solutions that have to be adopted in the exercise of a future professional scenario.

Understand the paper and functions of the leaders and executives in the company.

Acquire necessary knowledge and skills to direct teams in an effective way.

Know and understand managerial integrated technologies, as the management by objectives and the picture of integral control.



Acquire knowledge on the quality management of the company, understanding the principles and differences of the ISO models 9001 and EFQM of managerial excellence.

Understand the relationship between science, technology and innovation in the Spanish system.

Know creative technologies and basic aspects related to the organizational learning.

Understand the participants and the decisions involved in the management of the logistics and the chain of supply.

Know the systems of production, management of inventories and distribution.

## DESCRIPTION OF CONTENTS

### 1. The managerial work

- 1.1 Managerial functions.
- 1.2 Types of executives.
- 1.3 Managerial capabilities.
- 1.4 Effective speaking.

### 2. Leadership

- 2.1 Concept of leadership
- 2.2 Types of leadership.
- 2.3 Basic skills to manage teams and organizations.
- 2.4. Conducts of the leader that promotes the efficiency of the team and the organization.

### 3. Teamwork

- 3.1. Difference between work in group and teamwork.
- 3.2. Teamwork keys.
- 3.3. Methods for effective teams in practice.
- 3.4. Confronting complex situations in teams.

### 4. Managing for results and Balanced scorecard

- 4.1. The goal setting.
- 4.2. Importance of the indicators in the managerial tasks.
- 4.3. Managing for results.
- 4.4. Balanced scorecard.



## **5. Quality management**

- 5.1 Importance of managing the quality. Human and organizational aspects: leadership, cooperation, teamwork and motivation
- 5.2 Importance of managing the quality. Economic aspects: Costs of the quality and costs of not quality.
- 5.3 Principal perspectives on the quality concept: Conformity, satisfaction of the clients, relation value - price and excellence.
- 5.4 Classic and advanced approaches of the quality management: Inspection, quality control, insurance of the quality and management of the total quality.
- 5.5 Advantages and limitations of the different approaches.

## **6. The management of quality systems based on processes**

- 6.1. Concept of process and integral elements.
- 6.2 Technologies and tools for the control and improvement of the processes: classic and modern tools.
- 6.3 The management for processes and the ISO Model 9001.
- 6.4 The management for processes and the Model EFQM of managerial Excellence.

## **7. Relationship between science, technology and innovation**

- 7.1. Information, information and knowledge.
- 7.2. Relationship between science and technology.
- 7.3. Relationship between research and development and innovation.
- 7.4. Diffusion of the innovation.
- 7.5 Appropriation of the benefits of the innovations.

## **8. Creativity and learning**

- 8.1. Creativity and creative groups.
- 8.2 Technologies to generate ideas.
- 8.3 To heighten the creativity in the organization.
- 8.4 organizational Learning.
- 8.5 Obtaining technological knowledge.

## **9. Introduction to the management of purchase and production**

- 9.1 Basic concepts associated with the global management of purchase and production: supply; manufacture; store; transport; distribution.
- 9.2 The process of production: location, organization and production planning.
- 9.3 Management of the needs of materials (just in steals, mrp).
- 9.4 Relocation and new changes in the productive model (outsourcing, offshoring, nearshoring)

**10. Global management of the supply chain and the logistics**

10.1 Introduction to the logistics and the supply chain: basic concepts; process management of the chain of supply; logistic operators.

10.2. Inventory systems management and decisions on storage.

10.3. Foundations of the transport: types and characteristics.

10.4 The distribution process: conventional systems of distribution; electronic commerce and the distribution networks.

10.5 Information systems in the logistics, the stores and the distribution.

**WORKLOAD**

ACTIVITY	Hours	% To be attended
Theory classes	25,00	100
Computer classroom practice	23,00	100
Tutorials	2,00	100
Study and independent work	30,00	0
Preparation of evaluation activities	30,00	0
Preparation of practical classes and problem	15,00	0
<b>TOTAL</b>	<b>125,00</b>	

**TEACHING METHODOLOGY**

The subject will develop with an approximate dedication of 5 hours to every topic. In the sessions theory and practice will be combined, with the consequent improvement at the moment of promoting the debate and the discussion in class.

Theoretical classes: participatory lecture. Directed classes with practical activities.

Seminars. Workshops. Applied practical problems.

Use of the Virtual Classroom, the virtual space where all information considered appropriate for the development of different subjects, theories, problems, workshops, etc. is deposited, and that allows the control of student participation in daily activities.

Dynamic continuous assessment and use of audiovisual material.

Each of four modules has his own profile at the moment of designing the most suitable methodologies.

**EVALUATION**

Oral and / or written tests (examinations) based on learning outcomes and objectives of each subject, in its theoretical and / or practical parts (60%).





Continuous assessment of work, attendance, participation, case studies, presentations in class, etc. (40%).

The final approval will be obtained with a minimum overall rating of 5.0 out of 10.0.

Due to its face-to-face nature, continuous evaluation activities are not recoverable.

In any case, the evaluation system will be governed by what is established in the Evaluation and Qualification Regulations of the University of Valencia for Degrees and Masters.

(<https://webges.uv.es/uvTaeWeb/MuestraInformacionEdictoPublicoFrontAction.do?accion=inicio&idEdictoSeleccionado=5639>).

## REFERENCES

### Basic

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- Gómez Martínez, J.A. (2015): Guía para la aplicación de UNE-EN ISO 9001:2015 Editorial AENOR.
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- Miranda, F. J., Rubio, S., Chamorro, A. y Bañegil, T. M. (2005): Manual de dirección de operaciones, Thomson, Madrid.
- Pino Jiménez, Elisa del (2012): Trabajo en equipo: consigue en tu empresa un equipo ganador. FC editorial, Madrid.
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- Roberts, E.B. (1996): Gestión de la innovación tecnológica, Fundación COTEC, Madrid.
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#### **Additional**

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