

SUBJECT TEACHING GUIDE

1056 - Knowledge Dissemination in Chemical Engineering

Master's Degree in Industrial Engineering

Master's Degree in chemical engineering

Academic year 2024-2025

1. IDENTIFYING DATA					
Degree	Master's Degree in Industrial Engineering Master's Degree in chemical engineering			Type and Year	Optional. Year 2 Optional. Year 1
Faculty	School of Industrial Engineering and Telecommunications				
Discipline	Optional Subjects				
Course unit title and code	1056 - Knowledge Dissemination in Chemical Engineering				
Number of ECTS credits allocated	3	Term	Semester based (2)		
Web					
Language of instruction	English	English Friendly	No	Mode of delivery	Face-to-face

Department	DPTO. INGENIERIAS QUIMICA Y BIOMOLECULAR				
Name of lecturer	IGNACIO FERNANDEZ OLMO				
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Other lecturers	MARIA JOSE RIVERO MARTINEZ MANUEL ALVAREZ GUERRA				

3.1 LEARNING OUTCOMES
- Interpretation of technical and scientific results
- To improve the creativity and the elaboration of original contributions . This implies the planning, elaboration and management of the diffusion of technical and scientific knowledge
- The ability to write scientific and technical style manuscripts
- The ability to show technical and scientific information under different audience: oral and poster presentations
- Communication of scientific and engineering research to specialized and unspecialized audience

4. OBJECTIVES

To elaborate adequately and with certain originality reasoned arguments and written scientific /technical documents, such as scientific papers and technical reports, or to make reasonable assumptions.

Publicly presenting ideas, procedures or research reports, conveying emotions or advising individuals and organisations

To be able to further interpret the most advanced results

To manage properly databases and reference management software in the field of Chemical Engineering

6. SUBJECT PROGRAM

CONTENTS

1	<p>1. Written communication of scientific and engineering research</p> <p>1.1. Types of scientific and technical documents in chemical engineering</p> <p>1.2. Writing technical reports</p> <p>1.3. Writing scientific papers</p> <p>1.4. Writing abstracts and executive summaries</p> <p>1.5. Databases in chemical engineering</p> <p>1.6. Literature search through databases</p> <p>1.7. References management tools</p>
2	<p>2. Oral and poster presentations</p> <p>2.1. Poster elaboration</p> <p>2.2. Visual presentation elaboration</p> <p>2.3. Public presentation of scientific and engineering results</p>

7. ASSESSMENT METHODS AND CRITERIA

Description	Type	Final Eval.	Reassessn	%
Writing an executive summary of a project / business plan // Writing an abstract of a scientific work	Work	Yes	Yes	30,00
Literature search and reference management portafolio	Work	Yes	Yes	20,00
Poster elaboration	Others	Yes	Yes	20,00
Audiovisual presentation elaboration, video recording and defense	Others	Yes	Yes	30,00

TOTAL 100,00

Observations

In case of an off-site scenario, the same activities will be evaluated.
Submitting the four assignments is compulsory in the continuous assessment.

Observations for part-time students

In the event that there are no alternative options that allow the part-time student to participate regularly in face-to-face teaching activities, the student may be subject to a single assessment process, consisting of the submission of the same assignments in the ordinary examination period.

8. BIBLIOGRAPHY AND TEACHING MATERIALS

BASIC

M. Alejandro y B. Astete, "El artículo científico original. Estructura, estilo y lectura crítica". Editorial EASP, 1994, ISBN 84-87385-09-5

S.M. Weinschenk, "100 things every presenter needs to know about people". Berkeley, California : Editorial New Riders, cop. 2012, ISBN: 978-0-321-82124-9

R. Berry. "The research Project. How to write it". Editorial Routledge, 2000, ISBN 0-415-20520-4

I. Valiela, "Doing science: design, analysis, and communication of scientific research". Editorial Oxford University Press, 2001, ISBN 0-19-507962-0

R. A. Day, B. Gastel. "How to Write and Publish a Scientific Paper, Sixth Edition." Westport, Connecticut: Greenwood Press, 2006. ISBN: 0-313-33040-9

M. Powell. "Dynamic presentations". Cambridge University Press, 2013. ISBN: 978-0-521-15004-0