



IDENTIFYING DATA

Innovation, R&D Management and Intellectual Property in Bio-Industries

Subject	Innovation, R&D Management and Intellectual Property in Bio-Industries			
Code	V02M123V01215			
Study programme	(*)Máster Universitario en Ciencias Biológicas: Biología Molecular, Computacional e Ambiental e Bio-Industrias			
Descriptors	ECTS Credits	Type	Year	Quadmester
	6	Optional	1st	2nd
Language	English			
Department				
Coordinator	Gallego Veigas, Pedro Pablo			
Lecturers	Arán Echabe, Javier Gallego Veigas, Pedro Pablo López Lozano, María Ángeles			
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Web				
General description				

Competencies

Type A	Code	Competences Specific
	A1	(*)To know the scientific method and the correct use of the scientific terminology as well as to acknowledge the contribution that scientific research provides to the overall knowledge and professional practice.
	A2	(*)Ability to describe and to analyse biological diversity, the mechanisms determining the interactions with the biotic and abiotic environment and being able to select those which might have technical applications.
	A3	(*)Ability to manage and/or to develop basic tools for validating and analysing data by means of statistics and bioinformatics.
	A4	(*)To know the ethical and legal aspects governing the collection and the handling of biological samples, organisms and habitats.
	A5	(*)Ability to design, evaluate and implement models of biological structures, systems and processes.
	A6	(*)To learn the sampling techniques and the instrumental methodologies, in the field and laboratory, for their application in the Biological Sciences
	A7	(*)To have an integrated view of the R&D processes and their possible transfer to the industrial sector. Planning and supervising facilities together with managing their human and economic resources.
	A8	(*)Ability to classify, evaluate, conserve, restore and manage natural and productive systems. Developing and implementing land management and sustainability plans.
	A9	(*)To understand and know how to apply quality control systems and safety protocols in any biological laboratory of the public or private sector.

A10 (*)To acquire the professional ability to teach and spread Biology and to offer expertise advice for elaborating scientific, technical and socioeconomic biology reports. Address environmental consulting.

A11 (*)To perform an individual Master Project (critical and in-depth study) under the supervision of a tutor in a research or working environment demonstrating that skills have been acquired.

Type B Code Competences Transversal

B1 (*)Dissemination of results and conclusions of the biological studies, in oral and written English, through complex presentations that address ideas related with R&D in Biology.

B2 (*)Managing computational, laboratory, field and industrial techniques in order to obtain, process and apply the acquired information.

B3 (*)Disseminating and broadcasting ideas in contexts both academic and non-specialised.

B4 (*)Reflecting on social and ethical responsibilities.

Learning aims

Subject competences	Typology	Competences
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Learning achievements:

1.- Understand the importance of the technological innovation on bio-industries as the main asset capable of generating value and advantages for organizations so that they can compete successfully in the market or as a source of business opportunities

2 Acquire capabilities to manage intellectual capital in biotechnology´s sector to obtain innovations as well as their protection as intellectual property

To have an integrated view of the R&D processes and their possible transfer to the industrial sector. Planning and supervising facilities together with managing their human and economic resources.	know	A7
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To acquire the professional ability to teach and spread Biology and to offer expertise advice for elaborating scientific, technical and socioeconomic biology reports. Address environmental consulting.	know	A10
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Dissemination of results and conclusions of the biological studies, in oral and written English, through complex presentations that address ideas related with R&D in Biology.	Know How	B1
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Managing computational, laboratory, field and industrial techniques in order to obtain, process and apply the acquired information.	Know How	B2
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Disseminating and broadcasting ideas in contexts both academic and non-specialised.	Know How	B3
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Reflecting on social and ethical responsibilities.	Know How	B4
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Contents

Topic

Innovation management in bioindustries.

Biotechnology Business and their technological platforms. The "greener products".

Intellectual property: legislation and procedures.

Patents.

Planning

	Personalized attention	Assessment	Ordinary class hours A	Face-to-face hours outside the classroom Guided academic environment B	Student's work factor C	Outside the classroom hours D	Total hours (A+B+D) E
Introductory activities	<input type="checkbox"/>	<input type="checkbox"/>	1	0	0	0	1
Master Session	<input type="checkbox"/>	<input checked="" type="checkbox"/>	10	0	4	40	50
Case studies / analysis of situations	<input type="checkbox"/>	<input checked="" type="checkbox"/>	15	0	4	60	75
Short answer tests	<input type="checkbox"/>	<input type="checkbox"/>	1	0	2	2	3

Case studies / analysis of situations	□	□	3	0	6	18	21
Total hours E:							150
Work load in UVIGO ECTS credits:							6

*The information in the planning table is for guidance only and does not take into account the heterogeneity of the students.

Methodologies

	Description
Introductory activities	Efforts to make contact and gather information about the students, and to present the subject.
Master Session	Presentation by the teacher of the contents on the subject under study, theoretical and / or guidelines for a job, exercise or project to be developed by the student
Case studies / analysis of situations	Analysis of an event, issue or actual event in order to know, interpret, solve, generate hypotheses, comparing data, reflect, complete knowledge, diagnose and training in alternative dispute resolution procedures.

Personalized attention

Description

Assessment

	Description	Qualification
Master Session	TEST	30
Case studies / analysis of situations	Writing essay and oral presentation	70

Other comments and second call

Sources of information

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Official web sources:

www.oepm.es (Oficina española de patentes y marcas)

www.epo.org (Oficina europea de patentes)

www.wipo.int (Oficina mundial de la propiedad intelectual OMPI)

www.iprhelphdesk.eu (temas legales de propiedad industrial e industrial)

Other web sources:

“Learn from the past, create the future. Inventions and patents”. WIPO 2007

«Patents» (un comic de la WIPO)

«Exchanging value : Negotiating technology licensing agreements”. WIPO

“Successful technology licensing”. WIPO

Recommendations