

# Teaching guide

## IDENTIFICATION DETAILS

Degree:	Biotechnology
---------	---------------

Field of Knowledge:	Science
---------------------	---------

Faculty/School:	Experimental Science
-----------------	----------------------

Course:	FOOD TECHNOLOGY
---------	-----------------

Type:	Optional
-------	----------

ECTS credits:	3
---------------	---

Year:	4
-------	---

Code:	2059
-------	------

Teaching period:	Seventh semester
------------------	------------------

Area:	Applied Biotechnology
-------	-----------------------

Module:	Biotechnological Processes and Products
---------	---

Teaching type:	Classroom-based
----------------	-----------------

Language:	Spanish
-----------	---------

Total number of student study hours:	75
--------------------------------------	----

## SUBJECT DESCRIPTION

--

## SKILLS

### Basic Skills

Students must have demonstrated knowledge and understanding in an area of study that is founded on general secondary education. Moreover, the area of study is typically at a level that includes certain aspects implying
--

knowledge at the forefront of its field of study, albeit supported by advanced textbooks

Students must be able to apply their knowledge to their work or vocation in a professional manner and possess skills that can typically be demonstrated by coming up with and sustaining arguments and solving problems within their field of study

Students must have the ability to gather and interpret relevant data (usually within their field of study) in order to make judgments that include reflections on pertinent social, scientific or ethical issues

Students must be able to convey information, ideas, problems and solutions to both an expert and non-expert audience

Students must have developed the learning skills needed to undertake further study with a high degree of independence

### **General Skills**

To acquire firm theoretical, practical, technological and humanistic training needed to develop professional activity.

To be familiar with the applications of biotechnology in the healthcare, food, agrobiotechnological, environmental and chemical fields.

To be familiar with and apply current legislation governing biotechnological processes and products.

To understand the social, economic and environmental implications of professional activity.

Capacity for teamwork and group management.

To recognise the mutual influence existing between science, society and technological development in order to strive for a sustainable future.

To develop capacity for and a commitment to learning and personal development.

To develop an ability to search for, take in, analyse, sum up and relate information.

To be familiar with the basic principles and theories of human and experimental sciences.

To develop oral and written communication skills.

### **Specific skills**

To be familiar with microorganisms having industrial significance and understand their biotechnological potential.

To identify the main products of microbial origin with biotechnological applications in various social and economic areas.

To be familiar with the requirements of microorganisms and the cellular lines established to carry out large-scale fermentations.

To identify and understand the transformations taking place in the food industry and to be able to apply the techniques and procedures used in the management of the quality and conservation of processed foods.

To understand the social and environmental challenges of a globalised world in order to contribute to sustainable development.

To work suitably in a laboratory with biological material (bacteria, fungi, viruses, animal and plant cells, plants and animals) and with regard to the safety, handling and disposal of biological waste.

To organise and suitably plan work in the laboratory.

To identify and define laboratory instruments and materials.

To be able to describe, quantify, analyse and critically assess the results of experiments performed in the laboratory.

Capacity for written and oral communication of the knowledge acquired.

To be able to work in a team in an efficient and coordinated manner.

## **DISTRIBUTION OF WORK TIME**

<b>CLASSROOM-BASED ACTIVITY</b>	<b>INDEPENDENT STUDY/OUT-OF-CLASSROOM ACTIVITY</b>
30 hours	45 hours