SYLLABUS

1. Course description

Degree:	**Biotechnology**
Course:	**Animal and Plant Resources in Biotechnology**
Module:	**Optional Training**
Department:	**Molecular Biology and Biochemical Engineering**
Academic Year:	**2017/2018**
Term:	**Second**
ECTS credits:	**6**
Year:	**2nd year**
Type:	**Optional**
Language:	**Spanish**

Course Model:	**B1**
a. Basic learning (EB):	**60 %**
b. Practical learning (EPD):	**40 %**

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2. Lecturers

Coordinator	
Name:	**Mª Luisa Buide del Real**
School:	**School of Experimental Sciences**
Department:	**Molecular Biology and Biochemical Engineering**
Area:	**Botanics**
Office Hours:	**Mondays, Tuesdays and Wednesdays: 9.30-11.30**
Office:	**20-10B**
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5. CONTENIDOS DE LA ASIGNATURA (TEMARIO)

THEORY

BLOCK 1. PLANT RESOURCES:

Unit 1. Plant diversity and evolutionary path.

Unit 2. Fungi and lichens.

Unit 3. Seaweed.

Unit 4. Non-vascular plants (mosses) and vascular plants without seeds (ferns).

Unit 5. Gimnosperms.

Unit 6. Angiosperms.

BLOCK 2. ANIMAL RESOURCES:

Tema 7. Animal diversity and evolutionary path

Tema 8. Vermiform animals.

Tema 9. Molluscs.

Tema 10. Arthropods.

Tema 11. Chordates.

Tema 12. Other phyla of biotechnological interest.

PRACTICE:

BLOCK 1. PLANT RESOURCES: (6 hours)

Practice 1 (2 h).- The first practice will teach how plants are collected, how a herbarium is made, what data are needed for the field notebook and how the database is made from them. They will also begin to identify plants from dichotomous keys and by means of a binocular magnifying glass.

Practice 2 and 3 (4 h).- Identification of plants from keys and by means of a binocular magnifying glass. The students will identify the plants of the herbarium that they must

elaborate for the practical part of the subject. Duration: 2 hours each.

BLOCK 2. ANIMAL RESOURCES: (6 hours)

Practice 4 (2 h): Recognition of vermiform animals that cause parasitic diseases in livestock farms and humans, and their characteristic anatomical structures: flat worms (turbelaria, digene trematodes and cestodes), segmented worms (polychaetes, oligochaetes and achaeans), and round worms (nematodes).

Practice 5 (2 h): Identification of molluscs of commercial interest and in aquaculture: bivalves, gastropods and cephalopods.

Practice 6 (2 h): Identification of arthropods of economic interest: recognition of crustaceans for human consumption, insects with incidents in human activity: recognition of pollinators, urban and agricultural pests.