

## GENETICS

**Responsible professor: LAUREANA REBORDINOS GONZÁLEZ**

**Credits: 5,0 ECTS**

Brief description of the contents:

- Importance and interest of the management and conservation of genetic resources
- Introduction to population genetics
- Application of biotechnology to aquaculture
- Species identification: techniques and practical methods
- Computer programmes for population studies: characterisation and conservation
- Genetic improvement: methods, improvement programmes, etc.
- Regulation of gene expression

Detailed programme:

LEARNING BLOCK	TOPIC OR ACTIVITY
<b>B1</b>	Conservation of genetic resources: importance of biodiversity.
<b>B2</b>	Methods in conservation genetics.
<b>B3</b>	Preservation and analysis of genetic diversity: genetic markers.
<b>B4</b>	Population genetics.
<b>B5</b>	Conservation of genetic resources: genetics and management of wild populations.
<b>B6</b>	Computer programmes for the study of population genetics.
<b>B7</b>	Case study: population genetics.
<b>B8</b>	Case study: species identification.
<b>B9</b>	Genetic improvement in aquaculture.
<b>B10</b>	Conservation of genetic resources: genetic management of captive populations.
<b>B11</b>	Management of breeding stock.
<b>B12</b>	Monitoring of conservation programmes.
<b>B13</b>	Epigenetics and sexing control in fish.
<b>B14</b>	Introduction to genetic engineering: case study.
<b>B15</b>	Gene locating and mapping.
<b>B16</b>	Project presentations.
<b>B17</b>	Development of integrated genetic maps.
<b>B18</b>	Project presentations.

Evaluation system:

SYSTEM	WEIGHT
<b>Class attendance and participation</b>	5 – 20
<b>Presentations</b>	15 – 20
<b>Content test</b>	20 – 60