Academic plan of study (Degree of Biology)

First year

First semester

Course	Credits	Type
Biostatistics	6	Basic
Mathematics	6	Basic
Chemistry (*)	6	Basic
Experimental design and scientific method	6	Basic
Principles of animal experimentation	6	Basic

Second semester

Course	Credits	Type
Physics for biologists	6	Basic
Principles of geology for biologists (*)	6	Basic
Lab methods and instruments (*)	6	Basic
Methodology and experimentation in the natural environment	6	Basic
Bioinformatics	6	Basic

Second year

Annual subjects

Course	Credits	Type
Biochemistry (*)	12	Obligatory
Cell biology and plant and animal histology	12	Obligatory
Zoology	12	Obligatory
Botany	12	Obligatory
Microbiology	12	Obligatory

Third year

Annual subjects

Course	Credits	Type
Genetics	12	Obligatory
Animal physiology	12	Obligatory
Plant physiology (*)	12	Obligatory
Ecology	12	Obligatory

First semester

Course	Credits	Type
Advanced microbiology (**)	3	Obligatory

Course	Credits	Type
Immunology	3	Obligatory

Second semester

Course	Credits	Type
Project and work design and execution in biology	3	Optional

Fourth year

First semester

Course	Credits	Type
Optional 1	6	Obligatory
Optional 2	6	Optional
Optional 3	6	Optional
Optional 4	6	Optional
Optional 5	6	Optional

Second semester

Course	Credits	Type
Degree final project	12	Obligatory

Course	Credits	Type
Optional 6	6	Optional
Optional 7	6	Optional
Optional 8	6	Optional

Optional subjects and itineraries

Itinerary 1: Molecular and Clinical Biology

Annual subjects

Course	Credits	Type
External practices	6	Optional

First semester

Course	Credits	Type
Genetic Engineering, transgenesis and improvement (*)	6	Optional
Metabolic and molecular biochemistry (*)	6	Optional
Developmental biology and regeneration	6	Optional
Nutrition and food quality (*)	6	Optional
Agricultural, livestock, and industrial virology and bacteriology (*)	6	Optional

Course	Credits	Type
Endocrinology applied to clinical and animal production	6	Optional

Second semester

Course	Credits	Type
Human, clinical, and forensic genetics (*)	6	Optional
Clinical chemistry and clinical analysis	6	Optional
Biological bases of human reproduction (*)	6	Optional
Clinical microbiology (*)	6	Optional

Itinerary 2: Management of Natural and Agricultural Spaces

Annual subjects

Course	Credits	Type
External practices	12	Optional

First semester

Course	Credits	Type
Animal diversity and evolution	6	Optional
Ecosystem assessment and environmental consulting	6	Optional

Course	Credits	Type
Plant conservation Biology	6	Optional
Plant ecophysiology (*)	6	Optional

Second semester

Course	Credits	Type
Management and conservation of wildlife	6	Optional
Conservation and restoration of ecosystems	6	Optional
Geobotany and plant restoration	6	Optional
Plant pathology (*)	6	Optional

Foreign students are allowed, if included in their study contract, to take up to a maximum of 24 credits by performing some academically directed work. To see the rules that regulate this kind of activities, click here.

(*) Courses with support in English.

(**) Courses taught in English.

For the syllabus of the courses in English or with support in English click here.

For the syllabus of all courses click here.