

**Block view of the study programme**

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**Block 1**
**Core curriculum compulsory courses**

BIOL0852-1	<i>Ecosystems and climate change</i> - Monique CARNOL	Q2	24	16	-	3
BIOL0810-2	<i>Conservation biology</i> - Nicolas MAGAIN	Q2	30	-	-	4
BIOL0808-2	<i>Functional morphology</i> - <i>Marine vertebrates</i> - Eric PARMENTIER - <i>Birds, mammals, biomimicry</i> - Eric PARMENTIER - [1d FW]	Q1	15 10	10 15	- [+]	4
PALE0209-1	<i>Paleontology</i> - <i>Micropaleontology</i> - Emmanuelle JAVAUX - <i>Macropaleontology</i> - Valentin FISCHER	Q1	10 15	- 5	- -	3
BIOL0866-1	<i>Ecophysiology</i> - Claire PÉRILLEUX, JeanChristophe PLUMIER, Stéphane ROBERTY	Q1	25	15	-	3
BIOL2213-1	<i>Behavioural ecology</i> - Mathieu DENOËL, Laurane WINANDY	Q1	20	-	-	3
BIOL0854-1	<i>Ecotoxicology</i> (english language) - Célia JOAQUIMJUSTO	Q1	20	18	-	4
BIOL0812-2	<i>Biogeography</i> - Alain VANDERPOORTEN	Q2	25	-	-	3
GENE0446-2	<i>Population genetics</i> - Johan MICHAUX, Claire REMACLE	Q1	20	10	-	3
GENE0448-1	<i>Phylogenetic methods</i> - Denis BAURAIN	Q1	20	15	-	3
BIOL2041-1	<i>Taxonomy and animal phylogeny</i> - Loïc MICHEL	Q1	25	15	-	4
BIOL2040-1	<i>Taxonomy and phylogeny of chlorophyll lines</i> - Nicolas MAGAIN	Q2	25	15	-	4
SSTG0069-1	<i>Professional internship</i> - Fany BROTCORNE, Gilles LEPOINT, Nicolas MAGAIN, JeanChristophe PLUMIER, Carole ROUGEOT - [20d FW]	TA	-	-	[+]	8
BIOL0856-1	<i>Data analysis in ecology, ethology and evolutionary biology</i> - Flavien COLLART, Bruno FREDERICH	Q1	-	20	-	3

**Common core courses**

In agreement with the Jury, choose one of the following field placement modules:

**Conservation and Biodiversity Module**

SSTG0046-1	<i>Naturalistic building upon applied in conservation</i> - Nicolas MAGAIN - [8d FW]	TA	-	-	[+]	4
SSTG0066-1	<i>Internship: ecology applied to monitoring and conserving biodiversity</i> - Flavien COLLART, Mathieu DENOËL, Nicolas MAGAIN, Loïc MICHEL, Laurane WINANDY - [9d FW]	Q2	-	-	[+]	4

**Ecology and Biodiversity Module**

SSTG0024-1	<i>Training: biodiversity, phylogeny and ecology</i> - Flavien COLLART, Bruno FREDERICH, Véronique GOOSSE, Loïc MICHEL, Stéphane ROBERTY, Laurane WINANDY - [10d FW]	TA	-	-	[+]	5
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In agreement with the Jury, choose a field placement from among:

SSTG0064-1	<i>Applied biogeography</i> - Flavien COLLART, Alain VANDERPOORTEN - [6d FW]	Q2	-	-	[+]	3
SSTG0053-1	<i>Integrated ethometry internship</i> - Fany BROTCORNE, Mathieu DENOËL - [4d FW]	Q2	-	10	[+]	3

**Block 2**
**Core curriculum compulsory courses**

SMEM0013-1 *Final thesis* - COLLÉGIALITÉ, Bruno FREDERICH TA - - - 27  
*Notice* : Students who handle animals within the framework of their dissertation must have the Certificate in laboratory animal sciences, grade: animal biotechnologist. Prof. Mathieu DENOEL).

DOCU0462-1 *Preparing a dissertation in the biology of organisms and ecology* - Q1 15 - [+] 3  
 Monique CARNOL - [15h Mon. WS]

**Focus compulsory courses**

ZOOL0234-1 *Diversity of halieutic species and breeding: fish, shellfish and molluscs* - Q1 15 10 - 3  
 Bruno FREDERICH

ZOOL0235-1 *Physiology applied to aquaculture: a balance between productivity and respect for animal well-being* - Carole ROUGEOT Q1 30 15 - 4

BIOL0218-1 *Ecological monitoring and managing fishery resources* - Michaël OVIDIO Q1 10 15 - 3

HULG2012-2 *Fish and shellfish nutrition and feeding* - Rudy CAPARROS MEGIDO Q1 15 - - 3

ZOOL0236-1 *Ecology and the production of zooplanktonic organisms* - Q2 10 10 - 3  
 Célia JOAQUIMJUSTO

BIOL0220-1 *Operation and integrated management of continental aquatic environments* - Q2 10 10 - 3  
 Michaël OVIDIO

ZOOL0237-1 *Aquaculture production system: adaptability, innovation and integration in a sustainable environment* - Carole ROUGEOT - [16h Vis.] Q1 35 10 [+] 4

GEOG0272-1 *Economic issues and exploitation of the marine aquatic environment* - Q2 10 10 - 3  
 Guénaël DEVILLET

**Focus optional courses**

In agreement with the Jury, choose 2 courses for a total of 4 credits among:

BIOL0219-1 *Ecophysiology et production en masse de microalgues* - Pierre CARDOL Q2 10 10 - 2

VETE0206-1 *Immunology, virology and vaccinology of aquatic species* - Q1 18 2 - 2  
 Alain VANDERPLASSCHEN

VETE0207-1 *Pathology, bacteriology and parasitology of aquatic species* - Q2 15 10 - 2  
 Thierry JAUNIAUX

VETE2007-1 *Management of the quality and safety of foodstuffs derived from aquaculture and fishing* - Antoine CLINQUART, Véronique DELCENSERIE, Nicolas KORSKAK KOULAGENKO, MarieLouise SCIPPO - [5h Vis.] Q2 15 - [+] 2

ZOOL0238-1 *Integration of aquaponic aquaculture systems into urban and semi-urban agriculture* - Haissam JIJAKLI Q1 12 - - 2

**Bloc d'aménagement du programme de l'année**

**Bridging courses (max 15-60 credits) Master in biology of organisms and ecology (120 credits)**

The refresher programme, for a maximum of 60 credits, will be established by the jury of the Masters in Biology of Organisms and Ecology, depending on the student's prior training: this programme will enable the student to acquire the basic knowledge required in relevant fields (statistics, biology, biodiversity, etc.).

**Compulsory courses**

BIOL0518-4 *Biodiversity and ecology* TA 60 - - 7  
 - *Notions and concepts* - Gabriel CASTILLO CABELLO, Bruno FREDERICH, Eric PARMENTIER  
 - *Stage d'écologie marine* - Eric PARMENTIER - [5d FW] - - [+] 8

BIOL0868-1 *Biology of multicellular animal organisms* - Bruno FREDERICH Q1 15 15 - 3

BIOL0869-1	<i>Biology of multicellular plant organisms</i> - Claire PÉRILLEUX	Q1	15	15	-	<b>3</b>
BIOL0216-1	<i>Physiologie animale</i> - JeanChristophe PLUMIER	Q1	45	25	-	<b>6</b>
BIOL0217-2	<i>Vegetal physiology, Theory</i> - Claire PÉRILLEUX	Q2	35	-	-	<b>3</b>
BIOL2037-1	<i>Introduction to evolutionary biology</i> - Nicolas MAGAIN - [1d FW]	Q2	25	25	[+]	<b>4</b>
BIOL2038-1	<i>Soil ecology and microbiology</i> - Monique CARNOL - [1d FW]	Q1	25	10	[+]	<b>3</b>
BIOL2039-2	<i>Freshwater ecology, Theory</i> - Véronique GOOSSE, Célia JOAQUIMJUSTO	Q2	18	2	-	<b>2</b>
BIOC9244-1	<i>Genetics and introduction to molecular ecology</i> - Marc HANIKENNE	Q1	20	10	-	<b>2</b>
STAT0750-1	<i>Analyse statistique multivariée (logiciel R)</i> - Arnout VAN MESSEM	Q2	10	14	-	<b>3</b>
DOCU0460-1	<i>Training in the use of documentary resources in biology(refresher course)</i> - Hassan BOUGRINE, Monique CARNOL	Q1	6	6	-	<b>1</b>
STAT0077-1	<i>Computing analysis and processing of biological data</i> - Patrick MEYER	Q1	25	-	-	<b>2</b>

**Optional courses**

In agreement with the Jury, if necessary choose courses from:

Courses from the Bachelor in Biology.