

## Block view of the study programme

Or Th Pr Au Cr

### Block 1

#### Cours obligatoires du tronc commun

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

#### Cours au choix du tronc commun

En accord avec le Jury, choisir un module de stages de terrain parmi :

##### Module Conservation et Biodiversité

SSTG0046-1	<i>Naturalistic building upon applied in conservation</i> - Nicolas MAGAIN - [8d FW]	TA	-	-	[+]	<b>4</b>
SSTG0066-1	<i>Stage : écologie appliquée au suivi et à la conservation de la biodiversité</i> - Flavien COLLART, Mathieu DENOËL, Nicolas MAGAIN, Loïc MICHEL, Laurane WINANDY - [9d FW]	Q2	-	-	[+]	<b>4</b>

##### Module Ecologie et Biodiversité

SSTG0024-1	<i>Training: biodiversity, phylogeny and ecology</i> - [10d FW]	TA	-	-	[+]	<b>5</b>
------------	---	----	---	---	-----	----------

En accord avec le Jury, choisir un stage de terrain parmi :

SSTG0064-1	<i>Applied biogeography</i> - [6d FW]	Q2	-	-	[+]	<b>3</b>
SSTG0053-1	<i>Integrated ethometry internship</i> - [4d FW]	Q2	-	10	[+]	<b>3</b>

### Block 2

#### Cours au choix de la finalité

Choose one module from :

##### Module : Eco-éthologie fondamentale et appliquée

Choisir 3 cours (15 crédits) parmi :

##### General courses in ethology

# Study programmes 2024-2025

## Faculty of Sciences

### Master in biology of organisms and ecology, research focus

BIOL1063-1	<i>Social ethology</i>	Q1	20	10	-	<b>5</b>
PSYC0063-1	<i>Behavioural neuroendocrinology</i>	Q1	30	-	-	<b>5</b>
BIOL0858-1	<i>Animal communication</i>	Q1	20	10	-	<b>5</b>
ANTH0057-1	<i>Anthropology of the nature of animals</i> - Véronique SERVAIS	Q1	30	-	-	<b>5</b>

#### **Ethology of wildlife and management of fauna**

BIOL1064-1	<i>Behavioural primatology</i>	Q1	30	-	-	<b>5</b>
RAVT0002-2	<i>Eco-ethology and wildlife conservation</i> - [1d FW]	Q2	20	-	[+]	<b>5</b>
VETE0014-1	<i>Domestic Animal Behaviour Science</i> - Marc VANDENHEEDE	Q1	32	-	-	<b>5</b>
BIOL0859-1	<i>Insect behaviour</i> - Frédéric FRANCIS, François VERHEGGEN	Q1	20	10	-	<b>5</b>
ZOOL2021-1	<i>Ecology and dynamics of freshwater fish populations</i> - Theory - Practice	Q1	10	-	-	<b>5</b>
SSTG0062-1	<i>Internship: Ecology and the conservation of freshwater communities and amphibians</i> - [13d FW]	TA	-	-	[+]	<b>5</b>

#### **Module: Biology, Ecology and Ecotoxicology**

Choisir 3 cours (15 crédits) parmi :

BIOL0861-1	<i>Integrated management of entomological biodiversity</i> - Rudy CAPARROS MEGIDO, Frédéric FRANCIS	Q1	15	15	-	<b>5</b>
OCEA0084-1	<i>Marine ecotoxicology</i> (english language) - [15h Mon. WS]	Q1	15	-	[+]	<b>5</b>
BIOL0862-1	<i>Quantification of the environmental risk associated with pollutants and decision-making</i> (english language)	Q1	16	8	-	<b>5</b>
OCEA0227-1	<i>Tools for analysis and assistance for integrated management</i> - [5h Mon. WS]	Q1	15	15	[+]	<b>5</b>
BOTA0410-1	<i>Phylogeny of eukaryotes</i> - Denis BAURAIN	Q1	30	-	-	<b>5</b>
BIOL0025-1	<i>Animal symbiosis</i>	Q1	15	15	-	<b>5</b>
BIOL0030-1	<i>Modeling dynamical biological systems</i> (english language) - Marilaura GRÉGOIRE, Patrick MEYER - [15h Mon. WS]	Q1	15	-	[+]	<b>5</b>
OCEA0085-1	<i>Methods of investigation, observation and analysis of marine plankton</i> - [17h Mon. WS]	Q1	10	-	[+]	<b>5</b>
OCEA0223-1	<i>Biodiversity of tropical coastal regions: study and intercultural context</i> - Bruno FREDERICH, Gilles LEPOINT - [12d FW]	Q2	10	-	[+]	<b>5</b>
BIOL0820-1	<i>Morphological specific aspects of vertebrates : functional approach</i>	Q2	30	-	-	<b>5</b>
CHIM9212-1	<i>Biological applications of radioelements</i>	Q2	30	-	-	<b>5</b>
BIOL2042-1	<i>Population Biology</i> - [3d FW]	Q2	10	-	[+]	<b>5</b>
BIOL0821-1	<i>Natural Biomaterials : ultrastructural and functional aspects</i>	Q2	30	-	-	<b>5</b>
GBIO0022-1	<i>Biomimicry</i> (english language) - Philippe COMPÈRE, Tristan GILET, Davide RUFFONI - [45h Proj.]	TA	15	-	[+]	<b>5</b>
GEOG0238-5	<i>Geographical Information Systems, Introduction</i> - Roland BILLEN, François JONARD	Q1	15	15	-	<b>5</b>

En accord avec le Jury, choisir dans le programme du master en biologie des organismes et écologie, des cours non déjà suivis pour un total de 15 crédits

[...] cours du master en biologie des organismes et écologie

[...] cours des modules

[...] List of option courses

# Study programmes 2024-2025

## Faculty of Sciences

### Master in biology of organisms and ecology, research focus

Exceptionally, and in agreement with the Jury, one or several courses may be chosen from the courses' programmes of other field of education of the Faculty of Sciences, other faculties or other universities (for example, in connection with the final dissertation, etc.).

#### Cours obligatoires du tronc commun

SMEM0013-1	<i>Final thesis - COLLÉGIALITÉ</i>	TA	-	-	-	<b>27</b>
<i>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).</i>						
DOCU0462-1	<i>Preparing a dissertation in the biology of organisms and ecology -</i> Monique CARNOL - [15h Mon. WS]	Q1	15	-	[+]	<b>3</b>

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

## **Additional ECTS (max 15-60) Master in biology of organisms and ecology (120 ECTS)**

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	<i>Biodiversity and ecology</i> - <i>Notions and concepts</i> - Gabriel CASTILLO CABELLO, Bruno FREDERICH, Eric PARMENTIER - <i>Stage d'écologie marine</i> - Eric PARMENTIER - [5d FW]	TA	60	-	-	<b>7</b>
BIOL0868-1	<i>Biology of multicellular animal organisms</i> - N...	Q1	15	15	-	<b>3</b>
BIOL0869-1	<i>Biology of multicellular plant organisms</i> - Claire PÉRILLEUX	Q1	15	15	-	<b>3</b>
BIOL0216-1	<i>Animal physiology</i>	Q1	60	30	-	<b>7</b>
BIOL0217-2	<i>Vegetal physiology, Theory</i> - Claire PÉRILLEUX	Q2	35	-	-	<b>3</b>
BIOL2037-1	<i>Introduction to evolutionary biology</i> - [1d FW]	Q2	25	25	[+]	<b>4</b>
BIOL2038-1	<i>Soil ecology and microbiology</i> - [1d FW]	Q1	25	10	[+]	<b>3</b>
BIOL2039-2	<i>Freshwater ecology, Theory</i>	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>Multivariate statistical analysis (software R)</i> - Arnout VAN MESSEM	Q2	10	10	-	<b>3</b>
DOCU0460-1	<i>Training in the use of documentary resources in biology(refresher course)</i>	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.

#### List of option courses

HAAR0091-1	<i>Archaeozoology</i> - Annick GABRIEL	Q1	15	15	-	<b>3</b>
ENVT3045-1	<i>Ecosystems : conditions, anthropic impacts and management</i> - [16h Cl. inv.]	Q2	4	20	[+]	<b>3</b>
GEOL0099-1	<i>Biodiversity and extinctions</i> (english language) - Valentin FISCHER - [2d FW]	Q1	25	-	[+]	<b>3</b>
GEOL1022-2	<i>Origin and early evolution of life</i> (english language) - Emmanuelle JAVAUX	Q1	20	10	-	<b>3</b>
GEOL0263-1	<i>Astrobiology</i> (english language) - Vincianne DEBAILLE,	Q2	45	-	-	<b>3</b>

# Study programmes 2024-2025

## Faculty of Sciences

### Master in biology of organisms and ecology, research focus

, Yaël NAZÉ, Annick WILMOTTE

BIOL0114-4	<i>Electronic microscopies, Part A</i>	Q2	15	-	-	<b>3</b>
NEUR0434-1	<i>Functional Neuroanatomy</i>	Q2	30	-	-	<b>3</b>
BIOL0822-1	<i>Environmental physiology</i> (english language)	Q1	10	20	-	<b>3</b>
BIOL0823-1	<i>Ultrastructural cytochemistry</i> - Philippe COMPÈRE, Marc THIRY	Q2	30	-	-	<b>3</b>
OCEA0083-1	<i>Physiology and biochemistry of the marine animals</i> (english language)	Q1	15	15	-	<b>3</b>
GENE0003-1	<i>Genomics</i> - Marc HANIKENNE	Q2	20	-	-	<b>3</b>
OCEA0226-1	<i>Introduction to aquaculture</i>	Q1	30	-	-	<b>3</b>
GENE0441-1	<i>Organelle genetics</i> - <i>Part A</i> - Claire REMACLE - <i>Part B</i> - Claire REMACLE	Q2				<b>3</b>
ZOOL0230-2	<i>Methods to count and monitor freshwater fish populations</i> - [4d FW]	Q2	10	-	[+]	<b>3</b>
ZOOL0218-4	(pas organisé en 2024-2025) <i>Aquariology</i>	Q1	20	-	-	<b>3</b>
OCEA0144-1	<i>Biology of the coral reefs</i>	Q1	30	-	-	<b>3</b>
OCEA0027-1	<i>Applications of stable isotopes in marine sciences</i>	Q1	15	15	-	<b>3</b>
BIOC9245-1	<i>Macromolecules chemistry</i> - Moreno GALLENI, Loïc QUINTON	Q2	20	10	-	<b>3</b>
OCEA0230-1	<i>Marine invertebrate zoology</i> (english language) - Loïc MICHEL	Q1	20	10	-	<b>3</b>
PHYS0999-1	<i>Digital creation in sciences</i> - Roland BILLEN, Valentin FISCHER, Pierre MATHONET, JeanChristophe MONBALIU, Eric PARMENTIER, Nicolas VANDEWALLE - [30h Proj.]	TA	10	-	[+]	<b>3</b>
DOCU0455-1	<i>Introduction to critical thinking</i> - <i>Theory</i> - Yaël NAZÉ - <i>Practice</i> - Yaël NAZÉ	Q2				<b>3</b>
10				-	-	
				6	-	
LANG2971-2	<i>Academic English Writing</i> (english language) - Clara BRERETON, Véronique DOPPAGNE	Q1	25	-	-	<b>3</b>
LANG4007-1	<i>English - oral expression</i> (english language) - Clara BRERETON, Véronique DOPPAGNE	Q2	-	25	-	<b>3</b>