

## Two-Year Master Program (120 ECTS)

### First Year

#### Compulsory courses

AESS0254-1	<i>Introduction to biology didactics</i> - Marie-Noëlle HINDRYCKX	20	-	-	2
<b>Biology of Organisms</b>					
GENE0438-1	<i>Evolutionary genetics</i> - Vincent DEMOULIN, Johan MICHAUX, Claire REMACLE	30	30	-	5
BIOL0807-1	<i>Taxonomy and Phylogeny</i>				10
	- <i>Methodological part</i> - Alain VANDERPOORTEN	10	-	-	
	- <i>Plant part</i> - Emmanuël SÉRUSIAUX	20	15	-	
	- <i>Animal part</i> - Patrick DAUBY	40	30	-	
PALE0209-1	<i>Paleontology</i> - Philippe GERRIENNE, Emmanuelle JAVAUX, Edouard POTY	40	30	-	6
BIOL0808-2	<i>Functional morphology</i> - Pierre VANDEWALLE - [1d Vis.]	20	25	[+]	4
ANAT0223-1	<i>Embryology</i> - Vincent GEENEN	20	15	-	3
<b>Ecology</b>					
BIOL0809-1	<i>Ecophysiology, ethology</i> - Mathieu DENOËL, Claire PÉRILLEUX, Jean-Christophe PLUMIER, Pascal PONCIN	40	30	-	6
BIOL0810-2	<i>Conservation Biology</i> - Marc MORMONT, Emmanuël SÉRUSIAUX - [1d FW]	40	20	[+]	7
BIOL0811-1	<i>Natural resources and ecosystem disruptions</i> - Monique CARNOL, Jean-Pierre THOMÉ - [2d FW]	40	30	[+]	7
BIOL0812-2	<i>Biogeography</i> - Johan MICHAUX, Alain VANDERPOORTEN - [4d FW]	40	-	[+]	6

#### Optional courses

Placement to chose in the ecology field.

SSTG0023-1	<i>Training : phylogeny and ecology of Macaronesian flora</i> - Emmanuël SÉRUSIAUX - [10d FW]	-	-	-	[+] 4
SSTG0024-1	<i>Training : biodiversity, phylogeny and marine ecology</i> - Patrick DAUBY, Jean-Pierre THOMÉ, Pierre VANDEWALLE - [10d FW]	-	-	-	[+] 4

### Second year

#### Compulsory courses

SMEM0013-1	<i>Final thesis</i> - COLLÉGIALITÉ	-	-	-	28
BIOL0843-1	<i>Preparation to the final thesis</i> - COLLÉGIALITÉ	-	-	-	2

#### Choose one of the following focus :

##### Research Focus

#### Compulsory courses

STAT0750-2	<i>Multivariate statistical analysis</i> - Adelin ALBERT	20	-	-	2
DOCU0448-1	<i>Documentation training applied to biology</i> - Ninfa GRECO	20	-	-	2
SSTG0006-1	<i>Training and seminars</i> - COLLÉGIALITÉ	-	-	-	11

#### Optional courses

*Choose one option from the following :*

##### Advanced Zoology

Choose, in agreement with the Board of Studies, 5 courses, equaling 15 credits, amongst:

BIOL0820-1	<i>Morphological specific aspects of vertebrates : functional approach</i> - Pierre VANDEWALLE	30	-	-	3
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GEOL0071-4	<i>Evolution of the biosphere</i> - Edouard POTY	30	-	-	3
GEOL0218-2	<i>The principles and methods of evolution</i> - Edouard POTY	30	-	-	3
PALE0203-2	<i>Invertebrate Paleontology</i> - Edouard POTY	30	-	-	3
PALE0210-1	<i>Human origin and evolution</i> - Jean-Marie CORDY	30	-	-	3
PALE0211-1	<i>Mammals' paleontology</i> - Jean-Marie CORDY	30	-	-	3
HAAR0091-2	<i>Archaeozoology</i> - Jean-Marie CORDY	30	-	-	3
ZOOL0226-1	<i>General Entomology, 30h</i> - Michèle LONEUX	30	-	-	3
ZOOL0218-4	<i>Aquariology</i> - Christian MICHEL	30	-	-	3
BIOL0821-1	<i>Natural Biomaterials : ultrastructural and functional aspects</i> - Philippe COMPÈRE	30	-	-	3
BIOL0114-4	<i>Electronic microscopies</i> - Philippe COMPÈRE	15	-	-	3
CHIM9236-1	<i>Microstructure of Materials : characterization techniques</i> - Catherine HENRIST	15	-	-	3
GEOL1022-1	<i>Evolution of the biosphere in the Precambrian</i> - Emmanuelle JAVAUX (Odd years)	30	-	-	3
GEOL0263-2	<i>Astrobiology</i> - Philippe CLAEYS, Véronique DEHANT, Moreno GALLENI, Emmanuelle JAVAUX, Yaël NAZÉ, Pascal PONCIN, Annick WILMOTTE (Even years)	30	-	-	3
NEUR0434-1	<i>Functional Neuroanatomy</i> - Jean-Christophe PLUMIER	30	-	-	3
BIOL0822-1	<i>Advanced Course in Animal Physiology</i> - Jean-Christophe PLUMIER	30	-	-	3
NEUR0435-1	<i>Developmental neurotoxicology</i> - Jean-Christophe PLUMIER	30	-	-	3
BIOL0823-1	<i>Ultrastructural cytochemistry</i> - Philippe COMPÈRE, Marc THIRY	30	-	-	3
ZOOL0222-2	<i>Physiology and biochemistry of the marine animals</i> - Philippe COMPÈRE	30	-	-	3
CHIM9212-1	<i>Biological applications of radioelements</i> - Philippe COMPÈRE	30	-	-	3
ZOOL0227-1	<i>Genetic foundations of aquaculture</i> - Charles MÉLARD	30	-	-	3
GENE0441-1	<i>organelle genetics</i> - Claire REMACLE	30	-	-	3
LABO0432-2	<i>Techniques for cells and tissue cultures</i> - Marie-Claire GILLET	30	-	-	3
[...]	Courses for the European certificate of complementary studies in Neurosciences, jointly organized by the University of Liege and the Univerversity of Maastricht				
[...]	With the agreement of the Board of Studies and the dissertation supervisor, students have the possibility to choose one or two courses from another option or another Masters. Each course equals 3 credits.				

### Further Botany

Choose, in agreement with the Board of Studies, 5 courses, equaling 15 credits, amongst:

GEOL1023-1	<i>Palynology - advanced course on Paleozoic spores</i> - Philippe STEEMANS (Odd years)	30	-	-	3
BOTA0405-1	<i>In vitro culture of plants</i> - Claire KEVERS	30	-	-	3
BIOL0824-1	<i>Visualization methods and quantification in cell biology</i> - Patrick MOTTE	30	-	-	3
BOTA0406-1	<i>Phylogeny of thallophytes</i> - Vincent DEMOULIN	30	-	-	3
BOTA0407-1	<i>Botanical Nomenclature</i> - Vincent DEMOULIN	30	-	-	3
BIOL0844-1	<i>General bioloy of cryptogams (bryophyta and lichens)</i> - Emmanuël SÉRUSIAUX, Alain VANDERPOORTEN	30	-	-	3
BIOL0826-2	<i>Biogeography and plant and nature conservation</i> - Emmanuël SÉRUSIAUX - [6d FW]	-	-	[+]	3
BIOL0827-1	<i>Complements of plant cell physiology</i> - Patrick MOTTE	30	-	-	3
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### Ecology and Ethology

Choose, in agreement with the Board of Studies, 5 courses, equaling 15 credits, amongst:

ZOOL0228-1	<i>Demography and dynamics population of mammals and birds</i> - Roland LIBOIS	30	-	-	3
ZOOL0229-1	<i>Demography and dynamic of fish populations</i> - Michaël OVIDIO	30	-	-	3
ZOOL0230-2	<i>Development and management of freshwater fishes and their habitat</i> - Pascal PONCIN - [1d FW]	20	-	[+]	3

BIOL0828-1	<i>Hydrobiology and Limnology</i> - Anne GOFFART, Célia JOAQUIM#JUSTO, Jean-Pierre THOMÉ	30	-	-	3
ENVT0737-2	<i>Transfer and ecotoxicology of the micropollutants in the watery ecosystems</i> - Célia JOAQUIM#JUSTO, Jean-Pierre THOMÉ	30	-	-	3
OCEA0026-2	<i>Marine ecotoxicology</i> - Krishna DAS	30	-	-	3
BIOL0829-1	<i>Case study in ecology</i> - Monique CARNOL	30	-	-	3
CHIM0672-1	<i>Radioecology</i> - Christian VAN DE CASTEELE	30	-	-	3
OCEA0001-3	<i>Oceanology and underwater biology</i> - Sylvie GOBERT	30	-	-	3
ZOOL0220-2	<i>Planctonology</i> - Jean-Henri HECQ	30	-	-	3
OCEA0050-1	<i>Ecology of the Mediterranean benthos</i> - Vincent DEMOULIN, Mathieu POULICEK - [30h FW]	-	-	[+]	3
OCEA0044-3	<i>Ecology of the coral reefs</i> - Mathieu POULICEK	30	-	-	3
ENVT0884-1	<i>Ecology and economy of agricultural systems</i> - Alain HAMBUECKERS	30	-	-	3
ZOOL0003-2	<i>Ethometry</i> - Marc YLIEFF	30	-	-	3
PSYC1063-1	<i>Social ethology</i> - Marie-Claude HUYNEN	30	-	-	3
PSYC1064-1	<i>Behavioural primatology</i> - Marie-Claude HUYNEN	30	-	-	3
ZOOL0002-2	<i>Ethology applied to population management</i> - Pascal PONCIN - [1d FW]	20	-	[+]	3
ZOOL0232-1	<i>Ethology and amphibian conservation</i> - Mathieu DENOËL - [1d FW]	20	-	[+]	3
ZOOL0231-2	<i>Rhythms and behaviour in fish : endocrine aspects</i> - Pascal PONCIN - [1d FW]	20	-	[+]	3
OCEA0043-2	<i>Ecoethology of the marine animals</i> - Christian MICHEL	30	-	-	3
VETE0014-1	<i>Domestic Animal Behaviour Science</i> - Marc VANDENHEEDE	32	-	-	3
PSYC0061-1	<i>Animal and comparative neuropsychology</i> - André FERRARA	30	-	-	3
BIOL0830-1	<i>Circadian rhythms and biological clock</i> - Claire PÉRILLEUX	30	-	-	3
PSYC0063-1	<i>Behavioural neuroendocrinology</i> - Jacques BALTHAZART	30	-	-	3
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### Teaching focus

#### Compulsory courses

AESS0246-1	<i>Analysis of scholastic institutions and key-players, educational policies</i> - Jacqueline BECKERS	15	-	-	1
AESS0247-1	<i>Views on cultural diversity</i> - Jérôme JAMIN	10	-	-	1
AESS0248-1	<i>Elements of sociology of education</i> - Jean-François GUILLAUME	10	-	-	1
AESS0140-1	<i>Professional ethics and training to neutrality and citizenship</i> - Véronique DORTU	25	-	-	2
AESS0202-1	<i>General didactics: course and exercises ; observation placements ; reflexive practices</i> - Annick FAGNANT - [10h Internship]	30	10	[+]	4
AESS0004-1	<i>Media education</i> - Geneviève VAN CAUWENBERGE	15	-	-	1
AESS0249-1	<i>Interdisciplinary seminar</i> - Annick FAGNANT	15	-	-	1
AESS0143-1	<i>Educational Psychology of adolescents and young adults</i> - Annick FAGNANT	15	-	-	2
AESS0142-1	<i>Seminar on prevention and management of difficult school situations</i> - Jocelyne ROBERT	15	-	-	2
AESS0217-1	<i>Special didactics in biology (part I)</i>				6
	- <i>Course and exercises</i> - Marie-Noëlle HINDRYCKX	40	-	-	
	- <i>Training courses : teaching observation</i> - Marie-Noëlle HINDRYCKX - [10h Internship]	-	-	[+]	
	- <i>Training courses : teaching</i> - Marie-Noëlle HINDRYCKX - [20h Internship]	-	-	[+]	
	- <i>Reflexive practical work</i> - Marie-Noëlle HINDRYCKX	-	5	-	
AESS0235-1	<i>Special didactics in biology (part II)</i>				9
	- <i>Course and exercises</i> - Marie-Noëlle HINDRYCKX	35	-	-	
	- <i>Teaching placements</i> - Marie-Noëlle HINDRYCKX - [20h Internship]	-	-	[+]	
	- <i>Reflexive practical work</i> - Marie-Noëlle HINDRYCKX	-	5	-	
	- <i>School practical outside lectures</i> - Marie-Noëlle HINDRYCKX	-	10	-	