

## Two-Year Master Program (120 ECTS)

### First Year

#### Compulsory courses

AESS0254-1	<i>Introduction to biology didactics</i> - Marie-Noëlle HINDRYCKX	20	-	-	<b>2</b>
<b>Biology of Organisms</b>					
GENE0438-1	<i>Evolutionary genetics</i> - Vincent DEMOULIN, Johan MICHAUX, Claire REMACLE	30	30	-	<b>5</b>
BIOL0807-1	<i>Taxonomy and Phylogeny</i>				<b>10</b>
	- <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	-	<b>6</b>
BIOL0808-2	<i>Functional morphology</i> - Pierre VANDEWALLE - [1d Vis.]	20	25	[+]	<b>4</b>
ANAT0223-1	<i>Embryology</i> - Vincent GEENEN	20	15	-	<b>3</b>
<b>Ecology</b>					
BIOL0809-1	<i>Ecophysiology, ethology</i> - Mathieu DENOËL, Claire PÉRILLEUX, Jean-Christophe PLUMIER, Pascal PONCIN	40	30	-	<b>6</b>
BIOL0810-1	<i>Conservation Biology</i> - Marc MORMONT, Emmanuël SÉRUSIAUX - [3d FW]	40	20	[+]	<b>7</b>
BIOL0811-1	<i>Natural resources and ecosystem disruptions</i> - Monique CARNOL, Jean-Pierre THOMÉ	40	30	[+]	<b>7</b>
	- [2d FW]				
BIOL0812-2	<i>Biogeography</i> - Johan MICHAUX, Alain VANDERPOORTEN - [4d FW]	40	-	[+]	<b>6</b>
SSTG0013-1	<i>Training - N... - [10d FW]</i>	-	-	[+]	<b>4</b>

### Second year

#### Compulsory courses

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

Choose one of the following focus :

#### Research Focus

##### Compulsory courses

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

##### 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	-	-	<b>3</b>
GEOL0071-4	<i>Evolution of the biosphere</i> - Edouard POTY	30	-	-	<b>3</b>
GEOL0218-2	<i>The principles and methods of evolution</i> - Edouard POTY	30	-	-	<b>3</b>
PALE0203-2	<i>Invertebrate Paleontology</i> - Edouard POTY	30	-	-	<b>3</b>
PALE0210-1	<i>Human origin and evolution</i> - Jean-Marie CORDY	30	-	-	<b>3</b>
PALE0211-1	<i>Mammals' paleontology</i> - Jean-Marie CORDY	30	-	-	<b>3</b>
HAAR0091-2	<i>Archaeozoology</i> - Jean-Marie CORDY	30	-	-	<b>3</b>
ZOOL0226-1	<i>General Entomology, 30h</i> - Michèle LONEUX	30	-	-	<b>3</b>

ZOOL0218-4	<i>Aquariology</i> - Christian MICHEL	30	-	-	3
BIOL0821-1	<i>Natural Biomaterials: ultrastructural and functional aspects</i> - Philippe COMPÈRE	30	-	-	3
CHIM0640-1	<i>Microstructural Characterization techniques</i> - Philippe COMPÈRE, Catherine HENRIST	30	-	-	3
GEOL0264-2	<i>Complements of micropaleontology</i> - Emmanuelle JAVAUX	30	-	-	3
GEOL0263-2	<i>Astrobiology</i> - Philippe CLAEYS, Véronique DEHANT, Moreno GALLEN, Emmanuelle JAVAUX, Yaël NAZE, Annick WILMOTTE	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>The 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.				

#### Further Botany

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

PALE0208-3	<i>Advanced topics in Paleobotanics</i> - Philippe GERRIENNE	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
ENVTO883-1	<i>Operating databases and geographic information systems</i> - Claude DOPAGNE, Alain VANDERPOORTEN	30	-	-	3
BIOL0825-1	<i>In-depht Evolutionary Biology</i> - Alain VANDERPOORTEN	30	-	-	3
BIOL0826-1	<i>Biogeography and plant and nature conservation</i> - Emmanuël SÉRUSIAUX - [30h 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
ZOOL0230-1	<i>Development and management of freshwater fishes and their habitat</i> - Pascal PONCIN	30	-	-	3
BIOL0828-1	<i>hydrobiology and Limnology</i> - Anne GOFFART, Célia JOAQUIM#JUSTO, Jean-Pierre THOMÉ	30	-	-	3
ENVTO737-2	<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,	-	-	-	[+] 3

	OULICEK - [30h FW]			
OCEA0044-3	<i>Ecology of the coral reefs</i> - Mathieu POULICEK	30	-	- 3
ENVTO884-1	<i>Ecology and economy of agricultural systems</i> - Alain HAMBUCKERS	30	-	- 3
ZOOL0003-2	<i>Ethometry</i> - Ezio TIRELLI	30	-	- 3
PSYC1063-1	<i>Social ethology</i> - Marie-Claude HUYNEN	30	-	- 3
PSYC1064-1	<i>Behavioural primatology</i> - Marie-Claude HUYNEN	30	-	- 3
ZOOL0002-1	<i>Ethology applied to population management</i> - Pascal PONCIN	30	-	- 3
ZOOL0213-2	<i>Advanced Questions on Ethology</i> - Mathieu DENOËL	30	-	- 3
ZOOL0231-1	<i>Rhythms and behaviour in fish: endocrine aspects</i> - Pascal PONCIN	30	-	- 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>Experimental psychology of animal cognition</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: courses and exercises; observation placements; reflexive practices</i> - Jean-Luc GILLES - [10h Internship]	30	10	[+] 4
AESS0004-1	<i>Media education</i> - Geneviève VAN CAUWENBERGE	15	-	- 1
AESS0249-1	<i>Interdisciplinary seminar</i> - Nicolas LECLERCQ	15	-	- 1
AESS0143-1	<i>Educational Psychology of adolescents and young adults</i> - Dieudonné LECLERCQ	15	-	- 2
AESS0142-1	<i>Seminar on prevention and management of difficult scholastic 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>Observation placements</i> - Marie-Noëlle HINDRYCKX - [10h Internship]	-	-	[+]
	- <i>Teaching placements</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	-