

Study plan Biology, Master of Science

PO 2022

Areas Modules	Teaching courses	C / CE / Compl.	WS / SS		ECTS
Compulsory area: Biology					24
Biology in Ulm: Stress response and resilience of biological systems	Stress response and resilience of biological systems (L)	C	WS		3
	Scientific integrity, Data Analysis and Management (L)	C	SS		3
	Molecular Biology and Biotechnology (L)	C	WS		3
Advanced skills in life sciences	Philosophy of Science (S)	C	SS		3
Advanced methods in Biology	Advanced methods in Biology (P)	C	WS / SS		12
Compulsory elective area: Research focus Biology¹					30
Molecular biology of Archaea	Molecular biology of Archaea (S, P)	CE	WS		15
Advanced Microbiology	Advanced Microbiology (L, S, P)	CE	SS		15
Cell biology / genetics	Cell biology / genetics (L, S, P)	CE	SS		15
Endocrinology	Endocrinology (L, S, P)	CE	WS		15
Conservation Genomics	Conservation Genomics (L, S, P)	CE	WS		15
Applied Molecular Ecology and Evolution	Applied Molecular Ecology and Evolution (L, S, P)	CE	WS		15
Neurobiology & Behaviour	Neurobiology & Behaviour (L, S, P)	CE	SS		15
Chemical Ecology	Chemical Ecology (L, S, P)	CE	SS		15
Adaptation and diversity in tropical ecosystems	Adaptation and diversity in tropical ecosystems (L, S, P)	CE	WS		15
Tropical Ecology in Costa Rica	Tropical Ecology in Costa Rica (S, P)	CE	WS / SS		15
Functional morphology	Functional morphology (L, S, P)	CE	WS		15
(Molecular plant biology)	to be announced	CE			15
(Botany)	to be announced	CE			15
Compulsory elective area: Advanced topics in biological resilience²					9
Lectures of modules of the area "Research focus Biology", Courses in Biology	depending on choice	CE	WS / SS		3-9
Compulsory elective area: Biology in Praxis³					3
Excursion	choice from different excursion options	CE	SS		3
Career perspectives in life science	Career perspectives in life science (S)	CE	SS		3
Career exploration in Quality Assurance	(L)	CE	WS		3
Compulsory elective area: Research focus Medicine⁴					15
Human genetics	Human genetics (L, S, P)	CE	WS / SS		15
	Virology II - Part 1 & 2 (L, S)	CE	WS / SS		6
Virology	Virology II - Practical course (P)	CE	WS / SS		9
	Pharmacology (L)	CE	WS		3
	Toxicology (L)	CE	WS		3
Pharmacology/Toxicology	Pharmacology & Toxicology (P, 2 S)	CE	WS / SS		9
	Clinical Neuroscience Basic Lectures (L)	CE	WS		3
	Clinical Neuroscience Basic Seminar (S)		WS		3
Clinical Neuroscience	Clinical Neuroscience Practical Training (P)	CE	WS		9
Complementary area⁵					9
Elective courses from the modules offered at Ulm University	depending on choice	Compl.	WS / SS		9
Compulsory area: Thesis					30
Master thesis	Master thesis (P)	C	WS / SS		30
Sum					120

P: Practical course, L: Lecture, S: Seminar, E: Excursion, C: Compulsory area, CE: Compulsory elective area, Compl.: Complementary area, WS: winter semester,

¹ In the compulsory elective area "Research focus Biology", at least two modules are required.

² In the compulsory elective area "Advanced topics in biological resilience" modules of at least 9 ECTS are required.

³ In the elective compulsory area "Biology in Praxis" modules of at least 3 ECTS are required.

⁴ In the elective compulsory area "Research focus Medicine" at least 1 module is required.

⁵ Selection of modules of at least 9 ECTS from the study programmes offered by Ulm University, except MSc Biology.

⁶ For a mobility the areas "Advanced topics in biological resilience", "Biology in Praxis", "Research focus Medicine" and the Complementary area are intended.

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