

## Curriculum Master Program Molecular Life Science (WS 2018/19)

Semester	Cell Biology, Structure Biology, Neuroscience and Clinical immunology	Multidisciplinary competences	ECTS / WWH					
<b>1.</b>	<b>LS4010-KP06 Basics of Cell- and Molecular Biology for Virology (Cell Biology)</b> <b>(Molecular Virology)</b>	<b>LS4030-KP06 Molecular Pathomechanisms and Strategies of Therapy</b>	<b>MA3400-KP05 Biomathematics</b>	<b>CS4440-KP05 Molekulare Bioinformatik</b>	<b>EW4170-KP05 System Biology</b>			
			Chose 1 of 3					
	ECTS 6		Each 5					
	L/T/P/S 2/0/0/0 2/0/0/0		4/0/0/0			each 2/2/0/0		
	<b>LS4020-KP6 Structure Analytics: (chose 2)</b> <b>A Crystallography</b> <b>B NMR-Spectroscopy</b> <b>C Single Molecule Methods</b> <b>D Microscopy: techniques and applications</b>	<b>MZ5111-KP06 Immunology</b>	<b>MZ5115-KP06 Neuroscience 1</b>	<b>MZ5117-KP06 Frontiers in Metabolic Medicine Research</b>	<b>LS4040-KP04 Basic Virology and Biosafety</b>			
	Chose 2 of 4		Chose 1 of 3					
	ECTS 6		Each 6			4	33	
	L/T/P/S Each 2/0/0/0		Each 2/0/0/2			2/0/1/0	23	
<b>2.</b>	<b>MZ4121-KP06 Infection Biology</b>	<b>MZ4125-KP06 Neuroscience 2</b>	<b>MZ 4127-KP06 Clinical Immunology 1</b>	<b>LS4110-KP06 Drug Research</b> <b>(Pharmacology and Toxicology) (Rational Drug Design)</b>		<b>ME5051-KP05 Biophysics of Ionizing Radiation and Radiation Safety</b>	<b>ME5055-KP05 Animal Models and animal protection</b>	
	Chose 1 of 3			Chose 1 of 2				
	ECTS Each 6			Each 5				
	L/T/P/S Each 2/0/0/2			2/0/0/0	2/0/0/0	Each 2/0/2/0		
	<b>LS4101-KP08 Molecular Biomedicine A, B, C, D, E, F, G (see bottom)</b>		<b>LS4131-KP04 Membrane-Biophysics</b>	<b>LS4135-KP04 Protein-Biophysics</b>				
	Chose 3 of 7		Chose 1 of 2					
	ECTS 8		Each 4				29	
	L/T/P/S Each 2/0/0/0		Each 2/1/0/0				21/22	
<b>3.</b>	<b>LS5111-KP16 Practical Course MLS</b>							
	ECTS 16							
	L/T/P/S 0/0/24/0							
	<b>LS5200-KP06 Consolidating in Molecular Life Science [Wahlpflicht; chose 2 courses]</b>							
ECTS 6								
L/T/P/S Each 0/0/0/2								
<b>Start of the Master Thesis MLS</b>					28			
ECTS 6					28			
<b>4.</b>	<b>LS5990 Master Thesis MLS</b>					<b>PS4610-KP07 Ethics in Sciences / Scientific Writing</b>		
	ECTS 24					6	30	
						2/0/0/0	0/0/0/2	4
						ECTS WWH 120 >76		

L= lecture; T= tutorial; P= practical course; S= seminar; ECTS: credit point of the European transfer system; WWH = weekly work hours

LS4101- KP08: A Molecular Oncology, B Molecular Endocrinology, C Molecular Biology of the Cardiovascular System, D Tissue Regeneration, E Molecular Neurobiomedicine, F Clinical Immunology 2, G Neuroendocrinology

Required courses are Blue, Optional courses are Orange

