Module variant to: Advanced Molecular- and Cellular Biology

Module: Advanced Immunology	
University/Department/Teaching Unit: Freie Universität Berlin/Department of Biology, Chemistry, Pharmacy/Biology	
Module coordinator: Module instructors	
Prerequisites: successful participation of course "Introduction to Immunology" offered in the winterterm	
Learning objectives: The immunological class gives an overview of concepts of immunobiology in health and disease and also addresses current topics such as vaccination, immunity against pathogens, autoimmunity and impact of the microbiome on immunity and other ongoing research topics. The seminar further discusses recent immunological advances. The practical course will give insights into laboratory work in a scientific environment. This lecture, seminar and practical class is directed to trainees who already have a firm understanding of basic principles and wish to expand their knowledge. This course is the follow up course of the course Introduction to Immunolgoy offered in the winterterm and is composed of a theoretical part which overlaps with the class "Current Topics in Immunology" and an additional practical part.	
Content: The class will give trainees the possiblity to further extend and deepen their immunological knowledge in both a theoretical manner and by practical experience in the lab environment. Participants will be able to understand recent immunological advances and master current immunological topics.	

Modes of instruction	**Contact hours** (hours per week during the semester)	**Types of active participation**	**Workload** (in hours)	
Lecture (V)	2	–	Class attendance (lecture) Preparation, before and after (lecture)	30 30
Seminar (S)	1	Presentation and discussion	Class attendance (seminar) Preparation, before and after (seminar)	15 30
Safety Lab (sP)	5	Carrying out and documenting lab experiments	Class attendance (safety lab) Preparation, before and after (safety lab)	75 40
			Exam preparation and exam	80

Module assessment	Written exam (60 minutes), wholly or partially in multiple-choice format; can also be carried out electronically or written report on research results (approx. 10 pages) or examination colloquium (approx. 20 minutes)	
Language	English	
Regular attendance required	Seminar and safety lab: yes, lecture: attendance recommended	
Total workload	300 hours	10 credit points
Duration	one semester	
Frequency	irregular	
Applicability	Master's degree program M.Sc. Biology	

Utilization in the following specializations (decision by the examining board):

Biodiversity, Evolution and Ecology	
Genetics and Genomics	
Microbiology	x
Molecular- and Cellular Biology	x
Molecular Plant Sciences	
Neurobiology	x
Biology	x

U. Leo