

WPF-Katalog /Elective Courses

Angebot zum Wintersemester 2021_22 / Winter term 2021_22

Modul	Studiengang	SWS/ECTS	Einstufung laut Curriculum	Unterrichtssprache	Dozent	Anmerkungen
modul	study course	SWS/ECTS	categorization on curriculum	language	lecturer	note
Elective A: Advanced Bioinformatics	MSc Bio, 1. Sem	3 SWS	Elective A	Englisch	Dr. Stüber	number of participants: not limited
Elective A: Applied space medical microbiology & biotechnology	MSc Bio, 1. Sem	3 SWS	Elective A	Englisch	Prof. Möller (DLR)	number of participants: 10 The full-day course will take place in march 2022: 7.3.22-11.3.22
Elective A: Epidemiological Research	MSc Bio, 1. Sem	3 SWS	Elective A	Englisch	Dr. Adolph	number of participants: not limited, taught in five blocks Friday/Saturday
Elective A: Healthcare Market and Entrepreneurship	MSc Bio, 1. Sem	3 SWS	Elective A	Englisch	Dr. Worst	number of participants: not limited,
Elective A: FACS	MSc Bio, 1. Sem	3 SWS	Elective A	Englisch	Prof. Ilges	number of participants: 6 students Introduction into basic FACS technologies and software. The full-day course will take place in february 2022
Special Field (SF 3SWS) Next Generation Sequencing Course	MSc Bio, 3. Sem	3 SWS	Special Field, 3 ECTS	Englisch	Dr. J. Holtel	number of participants: 6 The students will learn the basics of NGS and will obtain practical skills how to prepare libraries for NGS from different metagenomic samples. The sample preparation will include amplification of DNA by qPCR and analysis of amplification data with the respective software; sample purification by magnetic beads; index PCR, resulting NGS library quantification. The NGS part will involve starting an NGS run on Miseq sequencer. After sequencing, primary (sequencing quality metrics) and secondary (fastaQ files) sequencing results will be analysed using in-house softwares and tools. To combine with a second SF (3 SWS)
Special Field (SF 3 SWS): Molecular Diagnostics of Covid-19	MSc Bio, 3. Sem	3 SWS	Special Field, 3 ECTS	Englisch	Dr. Jie Kang	number of participant: not limited The essentials and applications of all important and advanced molecular technologies such as realtime and digital PCR, NGS and nanopore sequencing as well as microarray in the pandemic will be elucidated, from identification of genome organization, development of various routine diagnostic assays to investigating infection pathways. To combine with a second SF (3 SWS)
Special Field (SF 3 SWS) Medical Devices Development and Regulation	MSc Bio, 3. Sem	3 SWS	Special Field, 3 ECTS	Englisch	Dr. Adolph	number of participants: not limited To combine with a second SF (3 SWS),taught in five blocks Friday/Saturday