

Module Handbook

TUK MODHB Homepage

Course BIO-BTE-06A-K-7

Molecular Biotechnology 2 (L, 12.0 LP)

Course Type

SWS	Type	Course Form	CP (Effort)	Presence-Time / Self-Study	
-	L	Laboratory course	12.0 CP	160 h	200 h
(L)			12.0 CP	160 h	200 h

Basedata

SWS	L
CP, Effort	12.0 CP = 360 h
Position of the semester	1 Sem. in WiSe
Level	[7] Master (Advanced)
Language	[EN] English
Lecturers	Mühlhaus, Timo, Jun. Prof. Dr. (PROF DEPT: BIO) Schroda, Michael, Prof. Dr. (PROF DEPT: BIO) Sommer, Frederik, Dr. (WMA DEPT: BIO)
Area of study	[BIO-BTE] Molecular Biotechnology and Systems Biology
Lifecycle-State	[NORM] Active

Contents

MS-based quantitative proteomics: Quantification of protein abundance and of protein complex stoichiometries in *Chlamydomonas* cells using label-free quantification, MRM and QconCAT approaches based on stable isotope labeling and quantitative mass spectrometry. Computational proteomics using statistical analysis of quantitative proteomics data sets.

Requirements for attendance (informal)

None

Requirements for attendance (formal)

Passed examination of [BIO-BTE-01-K-5] *"Mass Spectrometry and Deep sequencing Based Strategies in Systems Biology"*

References to Course [BIO-BTE-06A-K-7]

Course-Pool	Name
[BIO-VM_MCB-KPOOL-7]	Advanced Practical MCB
[BIO-VM_MPBiotech-KPOOL-7]	Advanced Practical MPBiotec