

Cell biology					
Module Code	Workload	Credits	Semester	Frequency of Module	Duration
	90 hrs.	3	3	Each semester	1 Semester
1	Module Components	Teaching Language	Contact Hours	Self Study	Class Size
	a) Zellbiologie	a) Deutsch	a) 22,5 hrs.	a) 67,5 hrs.	a) 50
2	<p>Learning Outcomes</p> <p>Nach erfolgreicher Teilnahme am Modul können die Studierenden ...</p> <p>Knowledge (1) ... draw a detailed draft of the cell structure, mebrane constitution and tissue organization</p> <p>Comprehension (2) ... describe the main function of each cellular compartment</p> <p>Application (3) ... independently evaluate cell-cell communication types</p> <p>Analysis (4) ... analyze and match specific cell signalling mechanisms</p> <p>Synthesis (5) ... compare the main mechanisms of cell survival and cell death</p> <p>Evaluation (6) ... evaluate disease diagnosis from transformed cellular characteristics</p>				
3	<p>Individual Component Content</p> <p>a) 1. Introduction to the cell: cells, biosynthesis, proteins 2. Cell organization: membrane structure and transport 3. Cell organization: cellular compartments 4. Vesicular traffic 5. Cell communication 6. The cell cycle 7. Apoptosis 8. The cytoskeleton 9. Cellular network: cell junctions, cell adhesion, the extracellular matrix 10. Stem cells and tissue renewal</p>				
4	<p>Teaching Methods</p> <p>a) Lecture</p>				

5	Prerequisites Participation in all lectures and seminars on biology in the first two semesters
6	Methods of Assessment a) Graded Assessment 1sbK (Written Exam) (3 LP)
7	Applicability of Module Molekulare und Technische Medizin B.Sc. (MTZ)
8	Person Responsible for Module Sanaz Taromi (Module Responsible)
9	Reading List (Core Texts and Recommended Texts) a) Alberts, Bruce: Essential cell Biology, 5th ed., Norton & Co 2019 Cooper, Geoffrey: The Cell: A Molecular Approach, 7th ed., Sinauer Assoc 2015 Alberts, Bruce: Molecular biology of the cell, 6th ed., Garland Science 2015