UNIVERSITÄT ZU LÜBECK

TECHNISCHE HOCHSCHULE LÜBECK

Joint Master´s program Biomedical Engineering

X4M 2320 Human Biochemistry/Medical Biotechnology	**Lecture 2 SWS** **Lab 2 SWS**
Workload:	see related module
Credit-points:	5
Medical Biotechnology – Lecture	
Type/duration:	Lecture, 2 SWS
Lecturer:	Ralf Moll
Language:	English
Curriculum:	Master`s program Biomedical Engineering, 2nd Semester
Prerequisites according to examination regulations	None
Recommended prerequisites:	Introductory Biochemistry and cell biology
Learning outcomes:	Biochemistry with related aspects of actual medical applications (Medical Biotechnology), Molecular aspects of In Vitro Diagnostics.
Content:	Basic / Advanced Biochemistry lectures
Literature:	Not fixed: journal articles, human metabolism: textbooks
Examination:	Written examination
Teaching methods:	Lectures using presentations and board, student´s talks/open discussions, interactive teamwork with lecturer/feedback
Medical Biotechnology – Lab course	
Type/duration:	2 SWS, lab/project
Lecturer:	Ralf Moll
Language:	English
Curriculum:	Master`s program Biomedical Engineering, 2nd Semester
Prerequisites according to examination regulations	None
Recommended prerequisites:	Introductory lab work in Chemistry and/or Biochemistry courses as bachelor
Learning outcomes:	Lab work organization, important biochemical methods
Content:	Handling of micropipettes/analytical balance, buffer production, acid/base titration, ELISA, DNA methods,

	electrophoresis
Literature:	Lab script
Examination:	Graded lab reports
Teaching methods:	Description/performance of lab experiments