

Program of Studies:	Master Program Bioinformatics
Name of the module:	NanoBioMaterials 1
Abbreviation:	B-M-7
Subtitle:	-
Modules:	Lecture: 2 h (weekly)
Semester:	1 st – 3 rd semester / every winter semester
Responsible lecturer:	Prof. Dr. Eduard Arzt
Lecturer:	Prof. Dr. Eduard Arzt and group members
Language:	German and English
Level of the unit/ Mandatory or not:	Graduate course / mandatory elective
Total workload:	90 h = 30 h of classes (lecture), 60 h of private study
Credits:	3
Entrance requirements:	None
Aims/Competences to be developed:	<p>The students acquire knowledge in:</p> <ul style="list-style-type: none"> - Economies of scale in materials science - basics and application - Preparative work in materials science - Analytical work in materials science
Content:	<ul style="list-style-type: none"> - Production of nanoparticles - Nanocomposites - Polymeric surface structures - Biological materials - Nanoparticles in a biological environment - Nanotribology - Micro/nanometals - Nanoanalysis I – Decomposition methods and chemical trace analysis - Nanoanalysis II and III – microscopy and diffraction
Assessment/Exams	Exam
Grade:	Grade of the exam
Literature:	Will be announced at the beginning of the course