

Modulbezeichnung	Biopolymers	
Modulbezeichnung (eng.)	Biopolymers	
Semester (Häufigkeit)	WPM (nach Bedarf)	
ECTS-Punkte (Dauer)	6 (1 Semester)	
Art	Wahlpflichtmodul (Sommersemester)	
Sprache(n)	English	
Studentische Arbeitsbelastung	60 h Kontaktzeit + 120 h Selbststudium	
Voraussetzungen (laut MPO)		
Empf. Voraussetzungen		
Verwendbarkeit	MTCE	
Prüfungsart und -dauer	Mündliche Prüfung oder Klausur 1,5 h (PL)	
Lehr- und Lernmethoden	Vorlesung, Praktikum	
Modulverantwortliche(r)	M. Rüscher gen. Klaas	
Qualifikationsziele At the end of the semester the students are able to -differentiate und understand different types of bio- polymers, -understand structure- property- relationships of polymers, -use biopolymers for product de- velopment, by -knowing the basic rules of polymer chemistry and technology, -understanding the differences bet- ween man-made polymers and nature's polymers, -preparing samples of biopolymers in the lab and ana- lyzing their properties, to -develop and produce biopolymers, -use these biopolymers for product development -contribute to a more sustainable polymer industry		
Lehrinhalte Ambiguity of the term 'biopolymer', principle of poly reactions, structure and property(thermo and duro plastics, degradation), man-made polymers, polymers in nature, basics of polymer technology and analy- sis, polymers to materials to products, importance and impact of plastic production, PLA as a case study.		
Literatur A detailed list of literature is supplied to the students and will be explained at the beginning of the module.		
Lehrveranstaltungen		
Dozenten/-innen	Titel der Lehrveranstaltung	SWS
M. Rüscher gen. Klaas	Biopolymers, Vorlesung	2
M. Rüscher gen. Klaas	Biopolymers, Praktikum	2