

<b>Module title</b>		<b>Abbreviation</b>
Principles of drug design		o8-MCM3-102-m01
<b>Module coordinator</b>		<b>Module offered by</b>
lecturers Pharmazeutische Chemie (Pharmaceutical Chemistry)		Institute of Pharmacy and Food Chemistry
<b>ECTS</b>	<b>Method of grading</b>	<b>Only after succ. compl. of module(s)</b>
5	numerical grade	--
<b>Duration</b>	<b>Module level</b>	<b>Other prerequisites</b>
1 semester	graduate	--
<b>Contents</b>		
German contents available but not translated yet.		
Grundlagen: Drug Targets (Art und Klassifizierung), Targetvalidierung, Wirkmechanismen, Protein-Ligand-WW, Lead-finding; Lead-optimization. Experimentelle Methoden: Bioassays, HTS, KombiChem, Naturstoffe. Theoretische Methoden: Molecular Modelling, Strukturbasiertes Wirkstoffdesign, Pharmakophormodelle, Docking, Virtuelles Screening, Simulationsmethoden, De-novo-Design. Ligandbasiertes Wirkstoffdesign. QSAR. Vorhersagen pharmakokinetischer und toxikologischer Größen (ADME). Fallbeispiele, Prodrug-Strategien, Bioisosterie, SAR.		
<b>Intended learning outcomes</b>		
The student masters theoretical and experimental methods and aspects of drug design.		
<b>Courses</b> (type, number of weekly contact hours, language – if other than German)		
S + Ü (no information on SWS (weekly contact hours) and course language available)		
<b>Method of assessment</b> (type, scope, language – if other than German, examination offered – if not every semester, information on whether module is creditable for bonus)		
presentation with discussion (approx. 30 minutes) Language of assessment: German or English		
<b>Allocation of places</b>		
Chemistry Master's and Mathematics Master's: no restrictions. Biochemistry Master's: 10 places. Places will be allocated by lot.		
<b>Additional information</b>		
--		
<b>Referred to in LPO I</b> (examination regulations for teaching-degree programmes)		
--		
<b>Module appears in</b>		
Master's degree (1 major) Biochemistry (2012) Master's degree (1 major) Chemistry (2010) Master's degree (1 major) Mathematics (2010) Master's degree (1 major) FOKUS Pharmacy (2012)		