

Medicinal Chemistry and Chemical Biology (MCCB)																				
Matriculation Fall 2020																				
Program-Specific Modules					Type	Assessment	Period	Status ¹	Sem.	CP	Jacobs Track Modules (General Education)									
Year 1 - CHOICE											45					15				
<i>Take the mandatory CHOICE modules listed below. This is a requirement for the MCCB program.</i>																				
Unit 1: Foundations of Medicinal Chemistry & Chemical Biology (default minor)											15					Unit: Methods / Skills				
CH-110 Module: General Medicinal Chemistry & Chemical Biology (default minor)											m 1 7.5					JTMS-MAT-07 Module: Mathematical Concepts for the Sciences				
CH-110-A	General Medicinal Chemistry & Chemical Biology	Lecture	Written examination	Examination period						5	JTMS-07		Mathematical Concepts for the Sciences	Lecture	Written examination	Examination period	m 1	5		
CH-110-B	General Medicinal Chemistry & Chemical Biology Tutorial	Tutorial								2.5	JTMS-SCL-17 Module: Physics for the Natural Sciences									
CH-111 Module: General Organic Chemistry (default minor)											m 2 7.5					Final exam				
CH-111-A	General Organic Chemistry	Lecture	Written examination	Examination period						5	JTMS-17		Physics for the Natural Sciences	Lecture	Written examination	Examination period	m 2	5		
CH-111-B	General Organic Chemistry Laboratory	Lab	Lab Reports	During the semester						2.5										
Unit 2: General Biochemistry and Cell Biology											15					Unit: Language				
CH-100 Module: General Biochemistry											m 1 7.5					German is default language. Native German speakers take modules in another offered language.				
CH-100-A	General Biochemistry	Lecture	Written examination	Examination period						5	JTLA-xxx Module: Language 1						m 1	2.5		
CH-100-B	General Biochemistry Laboratory	Lab	Lab reports	During the semester						2.5	JTLA-xxx		Language 1	Seminar	Various	Various	me			
CH-101 Module: General Cell Biology											m 2 7.5					JTLA-xxx Module: Language 2				
CH-101-A	General Cell Biology	Lecture	Written examination	Examination period						5	JTLA-xxx		Language 2	Seminar	Various	Various	m 2	2.5		
CH-101-B	General Cell Biology Laboratory	Lecture	Lab Reports	During the semester						2.5										
Unit 3: CHOICE (own selection)											me 15									
Take two further CHOICE modules from those offered for all other study programs ²																				
Year 2 - CORE											45					15				
<i>Take all CORE modules listed below or replace the mandatory elective (me) modules (15 CP) with suitable CORE modules from other study programs²</i>																				
Unit 1: Medicinal Chemistry & Chemical Biology (default minor)											15					Unit: Methods / Skills				
CO-420 Module: Medicinal Chemistry (default minor)											m 3 5					JTMS-SCL-16 Module: Analytical Methods				
CO-420-A	Medicinal Chemistry	Lecture	Written examination	Examination period						5	JTMS-16		Analytical Methods	Lecture	Written examination	Examination period	m 3	5		
CO-421 Module: Chemical Biology (default minor)											m 4 5					JTMS-SCL-18 Module: Plant Metabolites and Natural Products				
CO-421-A	Chemical Biology	Lecture	Written examination	Examination period						5	JTMS-18		Plant Metabolites and Natural Products	Lecture	Written examination	Examination period	m 4	5		
CO-422 Module: Pharmaceutical Chemistry (default minor)											m 3+4 5									
CO-422-A	Pharmaceutical Chemistry I	Lecture								3										
CO-422-B	Pharmaceutical Chemistry II	Lecture	Oral examination	Examination period						2.5										
Unit 2: Organic and Analytical Chemistry											15					Unit: Language				
CO-423 Module: Advanced Organic Chemistry											m 3 5					German is default language. Native German speakers take modules in another offered language.				
CO-423-A	Advanced Organic Chemistry	Lecture	Written examination	Examination period						5	JTLA-xxx Module: Language 3						m 3	2.5		
CO-443 Module: Scientific Software and Databanks											me 4 5					JTLA-xxx				
CO-443-A	Scientific Software and Databanks	Seminar	Report	During the semester						5	JTLA-xxx		Language 3	Seminar	Various	Various	me			
CO-424 Module: Advanced Organic and Analytical Chemistry Lab											m 3 5					JTLA-xxx Module: Language 4				
CO-424-A	Advanced Organic Chemistry Laboratory	Lab	Lab Reports	During the semester						2.5	JTLA-xxx		Language 4	Seminar	Various	Various	me			
CO-424-B	Analytical Chemistry Laboratory	Lab	Lab Reports	During the semester						2.5										
Unit 3: Drug Screening and Docking											15									
CO-425 Module: High Throughput Screening											me 3 5									
CO-425-A	High Throughput Screening	Lecture	Written examination	Examination period						5										
CO-426 Module: Physical Chemistry and Molecular Modelling											me 4 5									
CO-426-A	Physical Chemistry and Molecular Modelling	Lecture	Written examination	Examination period						5										
CO-427 Module: MCCB Laboratory											m 4 5									
CO-427-A	Medicinal Chemistry & Chemical Biology Laboratory	Lab	Lab Reports	During the semester						5										
Year 3 - CAREER											45					15				
CA-INT-900 Module: Internship / Startup and Career Skills											m 4/5 15					Unit: Big Questions				
CA-INT-900-0	Internship / Startup and Career Skills	Internship	Report/Business Plan	During the 5 th semester						15	JTBQ-BQ		Module: Big Questions				m	5/6		
CA-MCCB-800 Module: Seminar / Thesis MCCB											m 6 15					Take a total of 10 CP of Big Questions modules (each 2.5 or 5 CP) as mandatory elective				
CA-MCCB-800-T	Thesis MCCB	Thesis		15 th of May						12	Unit: Community Impact Project									
CA-MCCB-800-S	Seminar MCCB	Seminar	Thesis and Presentation	During the semester						3	JTCL-CI-950 Module: Community Impact Project						m 5	5		
Unit: Specialization MCCB											m 15					JTCL-950				
<i>Take a total of 15 CP of specialization modules</i>																Community Impact Project				
CA-S-MCCB-801	Advanced Organic Synthesis	Lecture	Oral examination	Examination period						5										
CA-S-MCCB-802	Fluorine in Drug Development	Lecture	Oral examination	Examination period						2.5										
CA-S-MCCB-803	Current Topics in the Molecular Life Sciences	Seminar	Presentation	During the semester						5										
CA-S-xxx	Specialization electives (from CBT and BCCB) (see study program handbook) ²		Various	Various						5/6										
Total CP											45					180				

¹ Status (m = mandatory, me = mandatory elective)

² For a full listing of all CHOICE / CORE / CAREER / Jacobs Track modules please consult the CampusNet online catalogue and /or the study program handbooks.