

Medicinal Chemistry and Chemical Biology (MCCB)																				
Matriculation Fall 2019																				
Program-Specific Modules					Jacobs Track Modules (General Education)															
Type	Assessment	Period	Status ¹	Sem.	CP	Type	Assessment	Period	Status ¹	Sem.	CP									
Year 1 - CHOICE					45					Year 1 - CHOICE					15					
Take the mandatory CHOICE modules listed below. This is a requirement for the MCCB program.																				
Unit 1: Foundations of Medicinal Chemistry & Chemical Biology (default minor)					15					Unit: Methods / Skills					10					
CH-110 Module: General Medicinal Chemistry & Chemical Biology (default minor)					m 1 7.5					JTMS-MAT-07 Module: Mathematical Concepts for the Sciences					Final exam m 1 5					
CH-110-A	General Medicinal Chemistry & Chemical Biology	Lecture	Written examination	Examination period								JTMS-07	Mathematical Concepts for the Sciences	Lecture	Written examination	Examination period				
CH-110-B	General Medicinal Chemistry & Chemical Biology Tutorial	Tutorial																		
CH-111 Module: General Organic Chemistry (default minor)					m 2 7.5					JTMS-SCL-17 Module: Physics for the Natural Sciences					Final exam m 2 5					
CH-111-A	General Organic Chemistry	Lecture	Written examination	Examination period								JTMS-17	Physics for the Natural Sciences	Lecture	Written examination	Examination period				
CH-111-B	General Organic Chemistry Laboratory	Lab	Lab Reports	During the semester																
Unit 2: General Biochemistry and Cell Biology					15					Unit: Language					m 5					
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								JTLA-xxx	Module: Language 1							
CH-100-B	General Biochemistry Laboratory	Lab	Lab reports	During the semester								JTLA-xxx	Language 1	Seminar	Various	Various				m 1 2.5
CH-101 Module: General Cell Biology					m 2 7.5					JTLA-xxx Module: Language 2					m 2 2.5					
CH-101-A	General Cell Biology	Lecture	Written examination	Examination period								JTLA-xxx	Language 2	Seminar	Various	Various				me
CH-101-B	General Cell Biology Laboratory	Lecture	Lab Reports	During the semester																
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					Year 2 - CORE					15					
Take all CORE modules listed below or replace the mandatory elective (me) modules (15 CP) with suitable CORE modules from other study programs ²																				
Unit 1: Medicinal Chemistry & Chemical Biology (default minor)					15					Unit: Methods / Skills					10					
CO-420 Module: Medicinal Chemistry (default minor)					m 3 5					JTMS-SCL-16 Module: Analytical Methods					m 3 5					
CO-420-A	Medicinal Chemistry	Lecture	Written examination	Examination period								JTMS-16	Analytical Methods	Lecture	Written examination	Examination period				
CO-421 Module: Chemical Biology (default minor)					m 4 5					JTMS-SCL-18 Module: Plant Metabolites and Natural Products					m 4 5					
CO-421-A	Chemical Biology	Lecture	Written examination	Examination period								JTMS-18	Plant Metabolites and Natural Products	Lecture	Written examination	Examination period				
CO-422 Module: Pharmaceutical Chemistry (default minor)					m 3+4 5					Unit: Language					5					
CO-422-A	Pharmaceutical Chemistry I	Lecture																		
CO-422-B	Pharmaceutical Chemistry II	Lecture	Oral examination	Examination period																
Unit 2: Organic and Analytical Chemistry					15					German is default language. Native German speakers take modules in another offered language.										
CO-423 Module: Advanced Organic Chemistry					m 3 5					JTLA-xxx Module: Language 3					m 3 2.5					
CO-423-A	Advanced Organic Chemistry	Lecture	Written examination	Examination period								JTLA-xxx	Language 3	Seminar	Various	Various				me
CO-443 Module: Scientific Software and Databanks					me 4 5					JTLA-xxx Module: Language 4					m 4 2.5					
CO-443-A	Scientific Software and Databanks	Seminar	Report	During the semester								JTLA-xxx	Language 4	Seminar	Various	Various				me
CO-424 Module: Advanced Organic and Analytical Chemistry Lab					m 3 5															
CO-424-A	Advanced Organic Chemistry Laboratory	Lab	Lab Reports	During the semester																
CO-424-B	Analytical Chemistry Laboratory	Lab	Lab Reports	During the semester																
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																
CO-426 Module: Physical Chemistry and Molecular Modelling					me 4 5															
CO-426-A	Physical Chemistry and Molecular Modelling	Lecture	Written examination	Examination period																
CO-427 Module: MCCB Laboratory					m 4 5															
CO-427-A	Medicinal Chemistry & Chemical Biology Laboratory	Lab	Lab Reports	During the semester																
Year 3 - CAREER					45					Year 3 - CAREER					15					
CA-INT-900 Module: Internship / Startup and Career Skills					m 4/5 15					Unit: Big Questions					10					
CA-INT-900-0	Internship / Startup and Career Skills	Internship	Report or business plan	During the 5 th semester																
CA-MCCB-800 Module: Seminar / Thesis MCCB					m 6 15					JTBQ-BQ Module: Big Questions					m 5/6					
CA-MCCB-800-T	Thesis MCCB			15 th of May																
CA-MCCB-800-S	Seminar MCCB	Seminar	Thesis and Presentation	During the semester																
Unit: Specialization MCCB					m #### 15					Take a total of 10 CP of Big Questions modules (each 2.5 or 5 CP) as mandatory elective					various Various Various me 10					
CA-S-MCCB-801	Advanced Organic Synthesis	Lecture	Oral examination	Examination period	me	6	5													
CA-S-MCCB-802	Fluorine and Drug Development	Lecture	Oral examination	Examination period	me	5	2.5													
CA-S-MCCB-803	Current Topics in the Molecular Life Sciences	Seminar	Presentation	During the semester	me	5	5													
CA-S-xxx	Specialization electives (from Chemistry and BCCB) (see study program handbook) ²		Various	Various	me	5/6	5													
Total CP					45					Total CP					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.