

Appendix 1a - Mandatory Module and Examination Plan for World Track

Program-Specific Modules					Jacobs Track Modules (General Education)						
Type	Status ¹	Semester	Credits		Type	Status ¹	Semester	Credits			
Year 1 - CHOICE					Year 1 - CHOICE					45	20
<i>Take the two mandatory CHOICE modules listed below, these are a requirement for the Chemistry program.</i>											
CH03-400102	Module: Organic Chemistry		m	15	JT-ME-MethodsMath	Module: Methods / Mathematics		m	7,5		
CH03-400102	Organic Chemistry I	Lecture	m	1	5	JT-ME 120106 / 120103	Take either Applied Calculus I or Calculus I	Lecture	m	1	2,5
CH03-400112	Organic Chemistry I Lab	Lab	m	1	2,5	JT-ME 120107 / 120104	Take either Applied Calculus II or Calculus II	Lecture	m	1	2,5
CH03-400103	Organic Chemistry II	Lecture	m	2	5	JT-ME-120101	Mathematical Concepts in the Sciences	Lecture	m	2	2,5
CH03-400113	Organic Chemistry II Lab	Lab	m	2	2,5	JT-SK-Skills	Module: Skills		m	2,5	
CH05-PrincChemPhys	Module: Principles of Chemistry and Physics		m	15	JT-SK-990103	Scientific and Experimental Skills	Lecture	m	1	2,5	
CH05-400101	General Chemistry	Lecture	m	1	5	JT-TA-TriArea	Module: Triangle Area		m	5	
CH05-400111	General Chemistry Lab	Lab	m	1	2,5		Take two courses from the triangle (BUSINESS, TECHNOLOGY & INNOVATION, SOCIETAL CONTEXT) area. Each counts 2,5 ECTS ³	me	1/2	5	
CH05-200102	Thermodynamics and Optics	Lecture	m	2	5	JT-LA-Language	Module: Language		m	5	
CH05-200112	Thermodynamics and Optics Lab	Lab	m	2	2,5		Take two German courses (2,5 ECTS each).	Seminar	me	1/2	5
	Module: CHOICE (own selection)		e	1/2	15		Native German speakers take courses in another offered language				
Students take one further CHOICE module from those offered for all other study programs. ²					CA01-CarAdv	Career Advising⁴					
Year 2 - CORE					Year 2 - CORE					45	20
<i>Take all three modules <u>or</u> replace one with a CORE module from a different study program. ²</i>											
CO09-InorgSuMolChc	Module: Inorganic and Supramolecular Chemistry		me	15	JT-ME-MethodsMath	Module: Methods / Mathematics		m	7,5		
CO09-420432	Supramolecular Chemistry	Lecture	m	3	5	JT-ME-400205	Methods in Analytical Science	Lecture/L m		3	2,5
CO09-420434	Supramolecular Chemistry Lab	Lab	m	4	2,5	JT-ME-120122	Foundations of Linear Algebra I	Lecture	m	4	2,5
CO09-400221	Inorganic Chemistry	Lecture	m	4	5		Take one further Methods (mandatory) elective course. (2,5 ECTS). ²	Lecture	me	3/4	2,5
CO09-400232	Inorganic Chemistry Lab	Lab	m	4	2,5	JT-TA-TriArea	Module: Triangle Area		m	7,5	
CO08-PhysChem	Module: Physical and Analytical Chemistry		me	15		Take three courses from the triangle (BUSINESS, TECHNOLOGY & INNOVATION, SOCIETAL CONTEXT) area. Each counts 2,5 ECTS ³	me	3/4	7,5		
CO08-400121	Analytical Chemistry	Lecture	m	4	5	JT-LA-Language	Module: Language		m	5	
CO08-400231	Analytical Chemistry Lab	Lab	m	4	2,5		Take two German courses (2,5 ECTS each).	Seminar	me	3/4	5
CO08-400211	Physical Chemistry	Lecture	m	3	5		Native German speakers take courses in another offered language				
CO08-400262	Physical Chemistry Lab	Lab	m	4	2,5	CA01-CarAdv	Career Advising⁴				
CO07-ChemBiotec	Module: Chemical Biotechnology		me	15	Year 3 - CAREER					45	5
CO07-400104	Enzymes and Cells in Biochemical Production	Lecture	m	3	5	CA02 / CA03	Module: Internship / Study Abroad		m	5	20
CO07-400114	Biochemical Production Lab	Lab	m	3	2,5	CA06-CHEM	Module: Project/Thesis CHEM		m	15	
CO07-400105	Bioproducts and Biosystems Engineering	Lecture	m	4	5	CA06-400303	Project CHEM	m	6	5	
CO07-400115	Bioproducts and Biosystems Engineering Lab	Lab	m	3	2,5	CA06-400304	Thesis CHEM	m	6	10	
						CAS-WT-CHEM	Module: Specialization Area CHEM		m	10	
							Take 10 ECTS of specialization courses ²	me	5/6	10	
Total ECTS					Total ECTS					180	

¹ Status (m = mandatory, e = elective, 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 module handbook (on our website).

³ You are required to take six Triangle Area courses in total. Select two from each of the three triangle areas (BUSINESS, TECHNOLOGY & INNOVATION, SOCIETAL CONTEXT).

⁴ Mandatory component of the Jacobs University's Counseling and Advising Scheme.

Appendix 1b - Mandatory Module and Examination Plan for Campus Track

Chemistry – Campus Track

Matriculation Fall 2018

Program-Specific Modules	Type	Status ¹	Semester	Credits	Jacobs Track Modules (General Education)	Type	Status ¹	Semester	Credits				
Year 1 - CHOICE					45						20		
<i>Take the two mandatory CHOICE modules listed below, these are a requirement for the Chemistry program.</i>													
CH03-OrgChem	Module: Organic Chemistry			m	15	JT-ME-MethodsMath	Module: Methods / Mathematics			m	7,5		
CH03-400102	Organic Chemistry I	Lecture	m	1	5	JT-ME-120106 / 120103	Take either Applied Calculus I or Calculus I	Lecture	m	1	2,5		
CH03-400112	Organic Chemistry I Lab	Lab	m	1	2,5	JT-ME-120107 / 120104	Take either Applied Calculus II or Calculus II	Lecture	m	1	2,5		
CH03-400103	Organic Chemistry II	Lecture	m	2	5	JT-ME-120101	Mathematical Concepts in the Sciences	Lecture	m	2	2,5		
CH03-400113	Organic Chemistry II Lab	Lab	m	2	2,5	JT-SK-Skills	Module: Skills			m	2,5		
CH05-PrincChemPhys	Module: Principles of Chemistry and Physics				m	15	JT-SK-990103	Scientific and Experimental Skills	Lecture	m	1	2,5	
CH05-400101	General Chemistry	Lecture	m	1	5	JT-TA-TriArea	Module: Triangle Area			m	5		
CH05-400111	General Chemistry Lab	Lab	m	1	2,5		Take two courses from the triangle (BUSINESS, TECHNOLOGY & INNOVATION, SOCIETAL CONTEXT) area. Each counts 2,5 ECTS ³		me	1/2	5		
CH05-200102	Thermodynamics and Optics	Lecture	m	2	5	JT-LA-Language	Module: Language			m	5		
CH05-200112	Thermodynamics and Optics Lab	Lab	m	2	2,5		Take two German courses (2,5 ECTS each). Native German speakers take courses in another offered language	Seminar	me	1/2	5		
	Module: CHOICE (own selection)				e	1/2	15						
Students take one further CHOICE module from those offered for all other study programs. ²													
Year 2 - CORE					45						20		
<i>Take all three modules <u>or</u> replace one with a CORE module from a different study program. ²</i>													
CO09-InorgSuMolChem	Module: Inorganic and Supramolecular Chemistry				me	15	JT-ME-MethodsMath	Module: Methods / Mathematics			m	7,5	
CO09-420432	Supramolecular Chemistry	Lecture	m	3	5	JT-ME-400205	Methods in Analytical Science	Lecture/L m		3	2,5		
CO09-420434	Supramolecular Chemistry Lab	Lab	m	4	2,5	JT-ME-120122	Foundations of Linear Algebra I	Lecture	m	4	2,5		
CO09-400221	Inorganic Chemistry	Lecture	m	4	5		Take one further Methods (mandatory) elective course. (2,5 ECTS). ²	Lecture	me	3/4	2,5		
CO09-400232	Inorganic Chemistry Lab	Lab	m	4	2,5	JT-TA-TriArea	Module: Triangle Area			m	7,5		
CO08-PhysChem	Module: Physical and Analytical Chemistry				me	15		Take three courses from the triangle (BUSINESS, TECHNOLOGY & INNOVATION, SOCIETAL CONTEXT) area. Each counts 2,5 ECTS ³		me	3/4	7,5	
CO08-400121	Analytical Chemistry	Lecture	m	4	5	JT-LA-Language	Module: Language			m	5		
CO08-400231	Analytical Chemistry Lab	Lab	m	4	2,5		Take two German courses (2,5 ECTS each). Native German speakers take courses in another offered language	Seminar	me	3/4	5		
CO08-400211	Physical Chemistry	Lecture	m	3	5	CA01-CarAdv	Career Advising⁴						
CO08-400262	Physical Chemistry Lab	Lab	m	4	2,5								
CO07-ChemBiotec	Module: Chemical Biotechnology				me	15							
CO07-400104	Enzymes and Cells in Biochemical Production	Lecture	m	3	5								
CO07-400114	Biochemical Production Lab	Lab	m	3	2,5								
CO07-400105	Bioproducts and Biosystems Engineering	Lecture	m	4	5								
CO07-400115	Bioproducts and Biosystems Engineering Lab	Lab	m	3	2,5								
Year 3 - CAREER					45						5		
COXX	Module: Additional (4th) CORE module				m	5/6	15	JT-SK-Skills	Module: Skills			m	2,5
								JT-SK-990104	Advanced Scientific and Experimental Skills	Lecture	m	6	2,5
CA06-CHEM	Module: Project/Thesis CHEM				m	15	JT-TA-TriArea	Module: Triangle Area			m	2,5	
CA06-400303	Project CHEM		m	5	5		Take one course from the triangle (BUSINESS, TECHNOLOGY & INNOVATION, SOCIETAL CONTEXT) area. Each counts 2,5 ECTS ³		me	5	2,5		
CA06-400304	Thesis CHEM		m	6	10	CA01-CarAdv	Career Advising⁴						
CAS-CT-CHEM	Module: Specialization Area CHEM				m	15							
	Take 15 ECTS of specialization courses ²				me	5/6	15						
Total ECTS										180			

¹ Status (m = mandatory, e = elective, 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 module handbook (on our website).

³ You are required to take six Triangle Area courses in total. Select two from each of the three triangle areas (BUSINESS, TECHNOLOGY & INNOVATION, SOCIETAL CONTEXT).

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