

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

Earth and Environmental Sciences – World Track										
Matriculation Fall 2017										
Program-Specific Modules					Jacobs Track Modules (General Education)					
Type	Status ¹	Semester	Credits		Type	Status ¹	Semester	Credits		
Year 1 - CHOICE				45						20
Take the two mandatory CHOICE modules listed below, these are a requirement for the EES program.										
CH04-InorgChem	Module: Inorganic Chemistry and Environmental Systems			m				15		
CH04-210113	Introduction to Inorganic Chemistry and Earth & Environmental Systems	Lecture	m	1	5					
CH04-400111	Inorganic Chemistry I Lab	Lab	m	1	2,5					
CH04-210114	Advanced Earth & Environmental Systems and Inorganic Chemistry	Lecture	m	2	5					
CH04-210111	GeoEnvironmental Systems and their Chemistry - Field Lab	Excursion	m	2	2,5					
CH05-PhysNatSys	Module: Physics of Natural Systems			m				15		
CH05-200104	Classical Physics	Lecture	m	1	5					
CH05-200114	Classical Physics Lab	Lab	m	1	2,5					
CH05-210132	Introduction to Earth and Marine Systems	Lecture	m	2	5					
CH05-210103	Introduction to Earth System Data	Lab	m	2	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
Take all three modules <u>or</u> replace one with a CORE module from a different study program. ²										
CO10-FundEES	Module: Fundamental Earth and Environmental Sciences			me				15		
CO10-210201	Volcanism and Metamorphism	Lecture	m	3	2,5					
CO10-210203	Sedimentology	Lecture	m	3	2,5					
CO10-210206	Structural Geology	Lecture	m	3	2,5					
CO10-210204	Marine Environments	Lecture	m	4	2,5					
CO10-210133	Introduction to Mineralogy	Lecture	m	4	2,5					
CO10-041202	Fieldtrip Environmental Changes and Challenges in Northwestern Germany	Excursion	m	4	2,5					
CO11-EOEnvChem	Module: Earth, Ocean, and Environmental Geochemistry			me				15		
CO11-210241	Geochemistry of Igneous and Aqueous Systems	Lecture	m	3	2,5					
CO11-210302	Environmental Geochemistry	Lecture	m	3	2,5					
CO11-210362	Applied Geochemistry	Lecture	m	4	2,5					
CO11-210301	Isotope Geochemistry	Lecture	m	4	2,5					
CO11-210373	Mineral Resources	Lecture	m	4	2,5					
CO11-210202	Fieldtrip Volcanism and Hydrochemistry in the Eifel, Germany	Excursion	m	4	2,5					
CO12-EOEnvPhys	Module: Earth, Ocean, and Environmental Geophysics			me				15		
CO12-210223	Marine and Applied Geophysics	Lecture	m	3	2,5					
CO12-210225	Physics of System Earth	Lecture	m	3	5					
CO12-210214	Physical Oceanography	Lecture	m	3	2,5					
CO12-210213	Earth System Monitoring and Remote Sensing	Lecture	m	4	2,5					
CO12-210251	Oceanographic Excursion / Research Cruise North Sea	Excursion	m	4	2,5					
Year 3 - CAREER				45						5
CA02 / CA03	Module: Internship / Study Abroad			m				5	20	
CA07-EES	Module: Project / Thesis EES			m				15		
CA07-210304	Project EES		m	6	5					
CA07-210305	Thesis EES		m	6	10					
CAS-WT-EES	Module: Specialization Area EES			m				10		
	Take four specialization courses (2.5 ECTS each) ²			me				5/6	10	
Total ECTS										180
JT-ME-MethodsMath	Module: Methods / Mathematics			m				7,5		
JT-ME-120106	Applied Calculus I	Lecture	m	1	2,5					
JT-ME-120107	Applied Calculus II	Lecture	m	1	2,5					
JT-ME-120101	Mathematical Concepts in the Sciences	Lecture	m	2	2,5					
JT-SK-Skills	Module: Skills			m				2,5		
JT-SK-990103	Scientific and Experimental Skills	Lecture	m	1	2,5					
JT-TA-TriArea	Module: Triangle Area			m				5		
	Take two courses from the triangle (BUSINESS, TECHNOLOGY & INNOVATION, SOCIETAL CONTEXT) area. Each counts 2,5 ECTS ³			me				1/2	5	
JT-LA-Language	Module: Language			m				5		
	Take two German courses (2,5 ECTS each). Native German speakers take courses in another offered language			me				1/2	5	
CA01-CarAdv	Career Advising⁴									
JT-ME-MethodsMath	Module: Methods / Mathematics			m				7,5		
	Take three Methods (mandatory) elective courses (2,5 ECTS each). ²			me				3/4	7,5	
JT-TA-TriArea	Module: Triangle Area			m				7,5		
	Take three courses from the triangle (BUSINESS, TECHNOLOGY & INNOVATION, SOCIETAL CONTEXT) area. Each counts 2,5 ECTS ³			me				3/4	7,5	
JT-LA-Language	Module: Language			m				5		
	Take two German courses (2,5 ECTS each). Native German speakers take courses in another offered language			me				3/4	5	
CA01-CarAdv	Career Advising⁴									
JT-SK-Skills	Module: Skills			m				2,5		
JT-SK-990104	Advanced Scientific and Experimental Skills	Lecture	m	6	2,5					
JT-TA-TriArea	Module: Triangle Area			m				2,5		
	Take one course from the triangle (BUSINESS, TECHNOLOGY & INNOVATION, SOCIETAL CONTEXT) area. Each counts 2,5 ECTS ³			me				6	2,5	
CA01-CarAdv	Career Advising⁴									

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

Earth and Environmental Sciences – Campus Track											
Matriculation Fall 2017											
Program-Specific Modules					Jacobs Track Modules (General Education)						
Type	Status ¹	Semester	Credits		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 EES program.</i>											
CH04-InorgChem	Module: Inorganic Chemistry and Environmental Systems			m	15	JT-ME-MethodsMath	Module: Methods / Mathematics			m	7,5
CH04-210113	Introduction to Inorganic Chemistry and Earth & Environmental Systems	Lecture	m	1	5	JT-ME-120106	Applied Calculus I	Lecture	m	1	2,5
CH04-400111	Inorganic Chemistry I Lab	Lab	m	1	2,5	JT-ME-120107	Applied Calculus II	Lecture	m	1	2,5
CH04-210114	Advanced Earth & Environmental Systems and Inorganic Chemistry	Lecture	m	2	5	JT-ME-120101	Mathematical Concepts in the Sciences	Lecture	m	2	2,5
CH04-210111	GeoEnvironmental Systems and their Chemistry - Field Lab	Excursion	m	2	2,5	JT-SK-Skills	Module: Skills			m	2,5
CH05-PhysNatSys	Module: Physics of Natural Systems			m	15	JT-SK-990103	Scientific and Experimental Skills	Lecture	m	1	2,5
CH05-200104	Classical Physics	Lecture	m	1	5	JT-TA-TriArea	Module: Triangle Area			m	5
CH05-200114	Classical Physics Lab	Lab	m	1	2,5	Take two courses from the triangle (BUSINESS, TECHNOLOGY & INNOVATION, SOCIETAL CONTEXT) area. Each counts 2,5 ECTS ³					
CH05-210132	Introduction to Earth and Marine Systems	Lecture	m	2	5	JT-LA-Language	Module: Language			m	5
CH05-210103	Introduction to Earth System Data	Lab	m	2	2,5	Take two German courses (2,5 ECTS each). Native German speakers take courses in another offered language					
Module: CHOICE (own selection)				e	1/2	15	CA01-CarAdv				Career Advising⁴
<i>Students take one further CHOICE module from those offered for all other study programs. ²</i>											
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>											
CO10-FundEES	Module: Fundamental Earth and Environmental Sciences			me	15	JT-ME-MethodsMath	Module: Methods / Mathematics			m	7,5
CO10-210201	Volcanism and Metamorphism	Lecture	m	3	2,5	Take three Methods (mandatory) elective courses (2,5 ECTS each). ²					
CO10-210203	Sedimentology	Lecture	m	3	2,5	Lecture	me	3/4	7,5		
CO10-210206	Structural Geology	Lecture	m	3	2,5	JT-TA-TriArea	Module: Triangle Area			m	7,5
CO10-210204	Marine Environments	Lecture	m	4	2,5	Take three courses from the triangle (BUSINESS, TECHNOLOGY & INNOVATION, SOCIETAL CONTEXT) area. Each counts 2,5 ECTS ³					
CO10-210133	Introduction to Mineralogy	Lecture	m	4	2,5	JT-LA-Language	Module: Language			m	5
CO10-041202	Fieldtrip Environmental Changes and Challenges in Northwestern Germany	Excursion	m	4	2,5	Take two German courses (2,5 ECTS each). Native German speakers take courses in another offered language					
CO11-EOEnvChem	Module: Earth, Ocean, and Environmental GeoChemistry			me	15	CA01-CarAdv				Career Advising⁴	
CO11-210241	Geochemistry of Igneous and Aqueous Systems	Lecture	m	3	2,5						
CO11-210302	Environmental Geochemistry	Lecture	m	3	2,5						
CO11-210362	Applied Geochemistry	Lecture	m	4	2,5						
CO11-210301	Isotope Geochemistry	Lecture	m	4	2,5						
CO11-210373	Mineral Resources	Lecture	m	4	2,5						
CO11-210202	Fieldtrip Volcanism and Hydrochemistry in the Eifel, Germany	Excursion	m	4	2,5						
CO12-EOEnvPhys	Module: Earth, Ocean, and Environmental GeoPhysics			me	15						
CO12-210223	Marine and Applied Geophysics	Lecture	m	3	2,5						
CO12-210225	Physics of System Earth	Lecture	m	3	5						
CO12-210214	Physical Oceanography	Lecture	m	3	2,5						
CO12-210213	Earth System Monitoring and Remote Sensing	Lecture	m	4	2,5						
CO12-210251	Oceanographic Excursion / Research Cruise North Sea	Excursion	m	4	2,5						
Year 3 - CAREER				45						5	
COXX	Module: Additional (4th) CORE module			m	5/6	15					
CA07-EES	Module: Project / Thesis EES			m	15						
CA07-210304	Project EES		m	5	5	JT-SK-Skills	Module: Skills			m	2,5
CA07-210305	Thesis EES		m	6	10	JT-SK-990104	Advanced Scientific and Experimental Skills	Lecture	m	6	2,5
CAS-CT-EES	Module: Specialization Area EES			m	15	JT-TA-TriArea	Module: Triangle Area			m	2,5
Take six specialization courses (2,5 ECTS each) ²				me	5/6	15	Take one course from the triangle (BUSINESS, TECHNOLOGY & INNOVATION, SOCIETAL CONTEXT) area. Each counts 2,5 ECTS ³				
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.