

CONCEPT Curriculum Molecular Sciences 2017-2018 - 2nd year											
E = taught in English x When possible, 3 ec courses in the MLS programme after Q7 are given on Wednesdays P = priority course MLS I = Mo/Tue; II = Thur/Fri <i>Starting in 2017-2018, Chemistry courses and all Molecular Life Sciences priority courses will be taught in English</i>											
Chemistry				Molecular Life Sciences				Science			
code	5th Quarter	ec	code	6th Quarter	ec	code	7th Quarter	ec	code	8th Quarter	ec
E NWI-MOL027	DNA technology	3	E NWI-MOL032	Crystal structure	3	E NWI-MOL046	Quantum mechanics 2	3	E NWI-MOL056	Chemical bonding	3
E NWI-MOL016	Linear algebra	3	E NWI-MOL012	Mechanics 2A	3	E NWI-MOL042	Fourier analysis	3	E NWI-MOL025	Electricity and Magnetism 2A	3
E NWI-MOL040	Thermodynamics 2	3	E NWI-MOL041	Quantum mechanics 1	3	E NWI-MOL045	Microscopic techniques	3			
E NWI-MOL033	Programming in Matlab	3	E NWI-MOL102	Inorganic chemistry*	3	E NWI-MOL047	Synthesis of biomolecules	3	E NWI-MOL048A	Organic chemistry lab	6
E NWI-MOL028	Statistics	3	E NWI-MOL044	Inorganic chemistry lab**	3				or E NWI-MOL034	Condensed matter lab (max 16)	3
				* first 4 weeks; ** second 4 weeks			Choose from e.g.:	3	E NWI-MOL050	Condensed matter	3
						E NWI-MOL035	Chemistry and society	3	or E I NWI-BB017C*	Biochemistry-Molecular Biology II (Bi)	6
						E NWI-FCEM02B	CEM: Writing Skills/schrijfvaardigheid	3	E NWI-FCEM02B	CEM: Writing Skills/schrijfvaardigheid	3
						E NWI-MOL043	Bioinorganic chemistry	3			
						E NWI-MOL108	Magnetic resonance in chemistry	3			
										* if you take BB017C, MOL025 is optional	
		15			15			15			15
E NWI-MOL027	DNA technology	3	E NWI-MOL032	Crystal structure	3	E P I NWI-BB023B	Animal Cell biology	6	E P I NWI-BB017C	Biochemistry-Molecular Biology II (Bi)	6
E NWI-MOL075	Bioinformatica A	3	E NWI-MOL036	General Physiology	3				E I NWI-BB048B	Endocrinology	6
E NWI-MOL031	Biochemistry in the living cell	3	E NWI-MOL076	Programming: Matlab	3						
E NWI-MOL105	Inorganic biochemistry	3	E NWI-MOL038	Genetics	3	E P II NWI-MOL054	Toxicology	6	E P II NWI-MOL049A	Chemical biology project	6
E NWI-MOL028	Statistics	3	E NWI-MOL037	MLS and society	3	E II NWI-BB020B	Adaptatiefysiologie	6	E P II NWI-BB034B	Neurobiology	6
						E II NWI-BB085B	Brain and behaviour	6			
						E II NWI-BB047C	Hum. Embryology & Developm. Biol.	6	E II NWI-BB025B	Medical pathology	6
						E NWI-BB028B	History of biology	3			
						E NWI-FCEM02B	CEM: Writing Skills/schrijfvaardigheid	3	NL/E NWI-FFIL100	Philosophy (Biological topics)	3
						E NWI-MOL047	Synthesis of biomolecules	3	E NWI-FCEM02B	CEM: Writing Skills/schrijfvaardigheid	3
						E NWI-MOL108	Magnetic resonance in chemistry	3			
		15			15			15			15
Keuzes (uit voorkeursprofielen)											
E NWI-MOL027	DNA technology	3	NWI-MOL092	Panorama Science: energy	3	NWI-MOL092	Panorama Science: energy	3	E NWI-MOL056	Chemical bonding	3
E NWI-MOL075	Bioinformatica A	3	Keuzes (uit voorkeursprofielen)			Keuzes (uit voorkeursprofielen)			NWI-MOL051	Project spectroscopie	3
E NWI-MOL016	Lineaire Algebra	3	E NWI-MOL032	Crystal structure	3	NWI-NB027B	Neurofysica 1	3	E I NWI-BB017C	Biochemistry-Molecular Biology II (Bi)	6
NWI-NB006B	Trillingen en golven		E NWI-MOL036	General Physiology	3	E I NWI-BB023B	Animal Cell biology	6	E II NWI-BB034B	Neurobiology	6
NWI-MOL039	Fysisch practicum	3	NWI-MOL039	Fysisch practicum	3	E NWI-MOL046	Quantum mechanics 2	3	E NWI-MOL050	Condensed matter	3
E NWI-MOL040	Thermodynamics 2	3	E NWI-MOL041	Quantum mechanics 1	3	E NWI-MOL047	Synthesis of biomolecules	3	NWI-FCEM02B	Schrijfcursus	3
E NWI-MOL028	Statistics	3							NWI-FFIL100	Filosofie (Bio)	3
			E NWI-MOL102	Inorganic chemistry	3	NWI-FCEM02B	Schrijfcursus	3	E NWI-MOL025	Electricity and Magnetism 2A	3
			E NWI-MOL044	Inorganic chemistry lab	3	NWI-MOL085	Programmeren Matlab voor NW	3	E P II NWI-MOL049A	Chemical biology project	6
			E NWI-MOL038	Genetics	3	E NWI-MOL108	Magnetic resonance in chemistry	3	E NWI-MOL048B	Organic chemistry lab	6
			NWI-NB001B	Analytische mechanica	3						

CONCEPT Curriculum Molecular Sciences 2017-2018 - 3rd year											
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CONCEPT											
Chemistry						Tutor					
code	9th Quarter	ec	code	10th Quarter	ec	code	11th Quarter	ec	code	12th Quarter	ec
Electives, e.g.:			Electives, e.g.:			Electives, e.g.:			Electives, e.g.:		
Minor programme or exchange programme			Minor programme or exchange programme			Minor programme or exchange programme			Minor programme or exchange programme		
NWI-MOL029	Bioinformatica	3	E NWI-MOL064	Spectroscopy of Atoms and Molecules	3	E I NWI-MOL065	Chemometrics	6	NWI-MOL086	Bachelorstage	12
E II NWI-MOL095	Organic chemistry	6	E NWI-MOL094	Physical organic chemistry	3	NWI-MB024C	HERA (environmental risk assessment)	6		Academic skills	3
NWI-NB046C	Chemie en fysica v/d atmosfeer	3	NWI-MOL071	Kristalgroei	3	II NWI-MOL066	Structuur, functie en bioinformatica (max 18)	6	Electives, e.g.:		
E NWI-MOL110	Applied magnetic resonance	3	NWI-FCEM02B	Schrijfcursus	3	E II NWI-MOL054	Toxicology	6	NWI-MOL087A*	Practicum synthese (organisch) (max 18)	3
E I NWI-MOL053	Pharmacochemistry	6	NWI-MOL059	Statistische thermodynamica	6	E NWI-MOL093	Stereoselective synthesis	3	NWI-MOL087B*	Practicum synthese (anorganisch)	3
NWI-MOL106	Toegepaste quantumchemie	3	NWI-MOL091	Green chemistry	3	NWI-MOL035	Chemie & samenleving	3	* MOL087B only after MOL087A (total 6 ec)		
NWI-FFIL101	Filosofie 1 (Natuurkundige onderwerpen)	3	E/NL NWI-FFIL101	Philosophy 1 (Molecular topics)	3	E NWI-MOL096	Metalorganic chemistry (if available)	3	NWI-FCEM02B	Schrijfcursus	3
NWI-FCEM02B	Schrijfcursus	3	NWI-MB021B	Intr. Geographic Information Systems	6	NWI-FCEM02B	Schrijfcursus	3	E/NL NWI-FFIL100	Filosofie (Bio)	3
			NWI-GCSE007	Beleid, ondernemerschap en innovatie	3	NWI-MOL111	Biophysical chemistry	3			
			NWI-FC0042B	Debating science & society	3						
Molecular Life Sciences											
E P* I NWI-BB086	Genomics for Health and Environment (max 15 MLW)	12									
E P I NWI-BB063B	Neuroscience	6	E P I NWI-BB019B	Immunology (MAX 120 stud)	6	I NWI-BB065B	Pathofysiologie van de nier	6	NWI-MOL086	Bachelorstage	12
E P I NWI-MOL053	Pharmacochemistry	6	E I NWI-MOL107	RNA Structure and function	6	E P I NWI-MOL109	Chemometrics for Molecular Life Sciences	6		Academic skills	3
E P I NWI-BB024B	Physiology of microorganisms	6	E I NWI-BB039B	Neurodevelopment (MAX 60?)	6	E P I NWI-BB064B	Functional Genomics	6	NWI-MOL087A*	Practicum synthese (organisch) (max 18)	3
E P II NWI-MOL095	Organic chemistry	6	E P II NWI-MOL078	Nanobiotechnology	6	II NWI-MOL066	Structuur, functie en bioinformatica (max 18)	6	NWI-MOL087B*	Practicum synthese (anorganisch)	3
E P II NWI-MOL104	Medical biotechnology (max 25)	6	P II NWI-BB084B	Molecular principles of development	6	E P II NWI-MOL055	Molecular basis of Diseases	6	* MOL087B only after MOL087A (total 6 ec)		
E II NWI-BB080B	Neurophysiology of cognition and behaviour	6	II NWI-BB021B	Neurobiofysica	6	E II NWI-BB081B	Cognitive Neuroimaging (Brain dynamics)	6	NWI-FCEM02B	Schrijfcursus	3
E P* II NWI-BB086	Genomics for Health and Environment (max 15 MLW)					II NWI-MB024C	HERA (environmental risk assessment)	6	E/NL NWI-FFIL100	Filosofie (Bio)	3
*: NWI-BB086 6 ec count as priority course											
P NWI-MOL100	Spectroscopie van biomoleculen	3	NWI-MOL091	Green chemistry	3	P NWI-MOL111	Biophysical chemistry	3			
NWI-FFIL101	Filosofie 1	3	E/NL NWI-FFIL101	Philosophy 1 (Molecular topics)	3	E P NWI-MOL073	Comparative genome analysis (max 30)	3			
NWI-FCEM02b	Schrijfcursus	3	NWI-FCEM02B	Schrijfcursus	3	NWI-FCEM02B	Schrijfcursus	3			
E NWI-MOL110	Applied magnetic resonance	3	NWI-GCSE007	Beleid, ondernemerschap en innovatie	3						
NWI-ILSB103	Inleiding Educatie	3	NWI-FC0042B	Debating science & society	3						
Minor programme or exchange programme			Minor programme or exchange programme			Minor programme or exchange programme			Minor programme or exchange programme		
e.g. Minor Translational Neuroscience			e.g. Minor Translational Neuroscience			e.g. Minor Translational Neuroscience			e.g. Minor Translational Neuroscience		
Science Zie ook de voorkeursprofielen bij de studieadviseur											
profiel	Bio Fysisch										
Zie de voorkeursprofielen			Minor programme or exchange programme			Minor programme or exchange programme			Minor programme or exchange programme		
Minor programme or exchange programme			Minor programme or exchange programme			Minor programme or exchange programme			Minor programme or exchange programme		
			verplicht:			verplicht:			NWI-MOL086	Bachelorstage	12
			NWI-MOL099	Panorama: Food and Health	3	NWI-MOL099	Panorama: Food and Health	3		Academic skills	3
profiel	Fysisch Chemisch										
Zie de voorkeursprofielen			Minor programme or exchange programme			Minor programme or exchange programme			Minor programme or exchange programme		
Minor programme or exchange programme			Minor programme or exchange programme			Minor programme or exchange programme			Minor programme or exchange programme		
			verplicht:			verplicht:			NWI-MOL086	Bachelorstage	12
			NWI-MOL099	Panorama: Food and Health	3	NWI-MOL099	Panorama: Food and Health	3		Academic skills	3
profiel	Bio Chemisch										
Zie de voorkeursprofielen			Minor programme or exchange programme			Minor programme or exchange programme			Minor programme or exchange programme		
Minor programme or exchange programme			Minor programme or exchange programme			Minor programme or exchange programme			Minor programme or exchange programme		
			verplicht:			verplicht:			NWI-MOL086	Bachelorstage	12
			NWI-MOL099	Panorama: Food and Health	3	NWI-MOL099	Panorama: Food and Health	3		Academic skills	3