

SEMAINE			2019		ASSIGNMENTS			
			TUTORIALS					
			STATEMENT	DELIVERY	#1		#2	
				STATEMENT	DELIVERY	STATEMENT	DELIVERY	
#1	18 February - 24 February	Syllabus (All about the GBE course...) Quantification of microbial rates	EXCELTools Linear Equation solving Solver & Fitting					
#2	25 February - 3 March	Quantification of microbial rates Concept of Reduction Degree Fundamentals of Microbial Growth Stoichiometry	Tutorial#1 Growth					
#3	4 March - 10 March	#2.2 - Fundamentals of Microbial Growth Stoichiometry - Continued - Undefined chemical systems WWT modeling introduction	Tutorial#2 Stoichio	Tuto#0				
#4	11 March - 17 March	#ASM - Introduction to ASM (Activated Sludge Modelling)	Aquasim	Tuto#1				
#5	18 March - 24 March	#3 - Black box kinetics of microbial growth (Herbert-Pirt and Monod relations) Introduction to Aquasim & Assignment-project#1		Tuto#2	Ass#1 DBO5			
#6	25 March - 31 March	#3.1 - Black box kinetics of microbial growth (Extended Herbert-Pirt) Beyond substrate limitation, pH, temperature, inhibition & competition Assignment A.2.1. - A.2.2.	Tutorial#4 YGX	Aquasim			Ass#2 2.1-2	
#7	1 April - 7 April	#4 - Thermodynamic of growth Introduction Assignment-project#2 A 2.1/2.2				Ass#1 DBO5		
#8	8 April - 14 April	#5 Growth of microorganisms in BATCH reactors #5.1 Growth of microorganisms in CHEMOSTAT reactors	Tutorials#5 Chemosta	Tuto#4				
#9	15 April - 21 April	#5.2 COMPETITION in Chemostat Introduction Assignment-project#2 A 2.3 #5.3 Growth of microorganisms in reactors FEDBATCH		Tuto#5			Ass#2 2.3	
#10	22 April - 28 April	VACANCES						
#11	29 April - 5 May	#6 General aspects of transport processes in bioreactors - Gas transfer (Kla)	Tutorial#6 Kla			Ass#1 DBO5		
#12	6 May - 12 May	#6.1 Coupled transport/Conversion in bioreactors (limitation) #7 Fixed biomass bioprocess Biofilm		Tuto#6				
#13	13 May - 19 May	#7.1 Coupled transport-reaction kinetics in immobilized microorganisms						Ass#2 2.1-2
#14	20 May - 26 May	Introduction to Measurement & Instrumentation on environmental bioprocesses Introduction to SIE-M3 Environmental bioprocess practical labs						Ass#2 2.3
#15	27 May - 2 June	MCQ Final Evaluation						