Bio-146 2007 Fall Semester - Study plan

week	38	39	40	41	42	43	44	45	46	47		48	49	50	51
dates	22-Sept						3-Nov					1-Dec	8-Dec		
contact hours															
distance learning		X	X	X	X	X		X	X	X	X			X	X

Modules	20	21	22	23 a,b	24	21 - 24	20 - 24	25	26	27	28	25 - 28	20 - 28	
Self-tests	20													
		21												
			22											
				23a 23b										
					38a									
								25						
									26					
										27				
											28			
												38b		
Review questions						to 20-24						to 20-28		
Exams							exam 1						exam 2	
Problem solutions		Problems to modules 21 - 28, to be worked on weekly										problem test		
Databank-Search					deadline									
Case study								defined						dead line

Topics

Prerequisites: Repetition of terms and contents from chemistry and biochemistry, as well as from chapters BBOM 11th.ed: 2.4, 5.1-5.4, 5.6, (5.9- 5.12), 12.5, 12.6, 13.4 (metabolism and nutrition) and an overview from Bio-126

Photosynthesis
BBOM 11th.ed: 17.1.-17.5, 12.2, 12.25-12.26, 12.32, 12.35 (XIII pg.412), 13.3, 14.13

C-Autotrophy
BBOM 11th.ed: 17.6-17.7, (5.13),17.16, 17.24, 12.6

Chemolithotrophy and bio-thermodynamics
BBOM 11th.ed: 17.8-17.12, 17.24, 12.3-12.6, 13.8-13.10, 19.8, (19.12-19.14) and thermodynamic exercises from chapters 5, 6, 12, 13, 17, 19 and Appendix I pg. 993 ff.

Bio-Energetics and membrane topology
BBOM 11th.ed: 17.4, 17.5, 17.9-17.15, 6.13, 13.3, and again 5.1- 5.15

Repetition 1
includes the sections from the chapters in BBOM 11th ed. which are listed for modules 20 to 24

Open book exam 1
contents: modules 20 to 24, corresponding sections from chapters in BBOM 11th ed. 5, 6, 12, 13, 14, 17 and 19, Appendix I pg. 993 ff.
40 minutes

Electron transport and anaerobic respiration
BBOM 11th.ed: 17.13-17.15, 17.18, 19.12-19.14, 19.18, 12.18, 13.7

Fermentation
BBOM 11th.ed: 17.19-17.20, 12.11, 12.19, 12.20, 12.22, 19.11

Methanogenesis and acetogenesis
BBOM 11th.ed: 17.16-17.17, (12.11, 12.18, 12.19, 12.20, 12.22), 13.4, 19.10

Anaerobic degradation networks and syntrophies
BBOM 11th.ed: 17.21-17.23, 17.25-17.27, 19.10, 19.16-19.18

Repetition 2: includes the sections from the chapters in BBOM 11th ed. which are listed for modules 20 to 28
Problem tests: online checks to problem solutions (tests from home)

Open book exam 2
contents: modules 20 to 28, all listed sections from chapters in BBOM 11th ed. 5, 6, 12, 13, 14, 17 and 19, Appendix I pg. 993 ff.
60 minutes

Case study working time

Case study
December 22, final date to turn in case study