

Faculty of Metallurgy and Technology / CHEMICAL TECHNOLOGY / ECOLOGICAL MICROBIOLOGY

Course:	ECOLOGICAL MICROBIOLOGY			
Course ID	Course status	Semester	ECTS credits	Lessons (Lessons+Exercises+Laboratory)
5166	Mandatory	2	3	2+2+0
Programs	CHEMICAL TECHNOLOGY			
Prerequisites				
Aims				
Learning outcomes	uporede i razlikuju osnovne grupe mikroorganizama, uključujući prokariotske i eukariotske mikroorganizme i viruse; razumiju procese i mehanizme diobe bakterijskih ćelija, uporede i razlikuju osnovne puteve metabolizma kod mikroorganizama i odrede relativni prinos energije za svaki metabolički put, kao i da navedu krajnje proizvode i njihovu primjenu u industriji; razumiju krivu rasta i predvide uticaj različitih ekoloških uslova na rast mikroorganizama; uporede i razlikuju prokariotski i eukariotski genom i gensku ekspresiju kod njih; odrede ulogu mikroba u kruženju biogenih elemenata; odrede ulogu mikroorganizama u različitim životnim staništima; primjene simbiotske odnose mikroba sa drugim organizmima, uključujući komensalizam i parazitizam;; upotrijebe osnovne tehnike sterilizacije, bojenja i izolacije i kultivacije mikroorganizama.			
Lecturer / Teaching assistant				
Methodology				
Plan and program of work				
Preparing week	Preparation and registration of the semester			
I week lectures				
I week exercises				
II week lectures				
II week exercises				
III week lectures				
III week exercises				
IV week lectures				
IV week exercises				
V week lectures				
V week exercises				
VI week lectures				
VI week exercises				
VII week lectures				
VII week exercises				
VIII week lectures				
VIII week exercises				
IX week lectures				
IX week exercises				
X week lectures				
X week exercises				
XI week lectures				
XI week exercises				
XII week lectures				
XII week exercises				
XIII week lectures				

XIII week exercises						
XIV week lectures						
XIV week exercises						
XV week lectures						
XV week exercises						
Student workload						
Per week			Per semester			
3 credits x 40/30=4 hours and 0 minuts 2 sat(a) theoretical classes 0 sat(a) practical classes 2 excercises 0 hour(s) i 0 minuts of independent work, including consultations			Classes and final exam: 4 hour(s) i 0 minuts x 16 =64 hour(s) i 0 minuts Necessary preparation before the beginning of the semester (administration, registration, certification): 4 hour(s) i 0 minuts x 2 =8 hour(s) i 0 minuts Total workload for the subject: 3 x 30=90 hour(s) Additional work for exam preparation in the preparing exam period, including taking the remedial exam from 0 to 30 hours (remaining time from the first two items to the total load for the item) 18 hour(s) i 0 minuts Workload structure: 64 hour(s) i 0 minuts (cources), 8 hour(s) i 0 minuts (preparation), 18 hour(s) i 0 minuts (additional work)			
Student obligations						
Consultations						
Literature						
Examination methods						
Special remarks						
Comment						
Grade:	F	E	D	C	B	A
Number of points	less than 50 points	greater than or equal to 50 points and less than 60 points	greater than or equal to 60 points and less than 70 points	greater than or equal to 70 points and less than 80 points	greater than or equal to 80 points and less than 90 points	greater than or equal to 90 points