

Faculty of Science and Mathematics / MATHEMATICS / EQUATIONS OF MATHEMATICAL PHYSICS

Course:	EQUATIONS OF MATHEMATICAL PHYSICS			
Course ID	Course status	Semester	ECTS credits	Lessons (Lessons+Exercises+Laboratory)
12075	Mandatory	3	5	3+1+0
Programs	MATHEMATICS			
Prerequisites	Information about the course can be found within the EQUATIONS OF MATHEMATICAL PHYSICS course, Masters studies, MATHEMATICS AND COMPUTER SCIENCE program.			
Aims	Information about the course can be found within the EQUATIONS OF MATHEMATICAL PHYSICS course, Masters studies, MATHEMATICS AND COMPUTER SCIENCE program.			
Learning outcomes	After the student passes this exam, he will be able to: 1. Apply the basic principles of modeling natural and social phenomena with partial differential equations 2. Adjust the coefficients of partial differential equations in accordance with the considered situation 3. Prove the existence and uniqueness of solutions of known nonlinear partial differential equations 4 Recognize the type of partial differential equation and find its numerical solution. 5. Interprets solutions of equations as a description of the natural or social phenomenon it models.			
Lecturer / Teaching assistant	Information about the course can be found within the EQUATIONS OF MATHEMATICAL PHYSICS course, Masters studies, MATHEMATICS AND COMPUTER SCIENCE program.			
Methodology	Information about the course can be found within the EQUATIONS OF MATHEMATICAL PHYSICS course, Masters studies, MATHEMATICS AND COMPUTER SCIENCE program.			
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			
5 credits x 40/30=6 hours and 40 minuts 3 sat(a) theoretical classes 0 sat(a) practical classes 1 excercises 2 hour(s) i 40 minuts of independent work, including consultations			Classes and final exam: 6 hour(s) i 40 minuts x 16 =106 hour(s) i 40 minuts Necessary preparation before the beginning of the semester (administration, registration, certification): 6 hour(s) i 40 minuts x 2 =13 hour(s) i 20 minuts Total workload for the subject: 5 x 30=150 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) 30 hour(s) i 0 minuts Workload structure: 106 hour(s) i 40 minuts (cources), 13 hour(s) i 20 minuts (preparation), 30 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