Study programme(s) Mathematics (MA), Applied Mathematics (MB), Master in Mathematics Teaching(MP)	
Level: master	
Course title: Partial Differential Equations (MA-01)	
Lecturer: Marko Ž. Nedeljkov	
Status: obligatory on MA and on MB, elective on MP	
ECTS: 7	
Requirements: none	
Learning objectives Acquiring basic knowledge and skills in PDEs and their analysis.	
Learning outcomes Student should have a knowledge and ability to deal with simple PDEs with some additional literature.	
Syllabus *Theoretical instruction* Some PDEs models from other sciences. Classification of PDEs. Well posedness. Separation of variables. Wave equation, initial data and mixed problem. Energy integral. Initial data and mixed problem for the heat equation. Maximum principle. Sobolev spaces and weak solutions of PDEs. Distributions and Fourier transform. Weak solutions to wave and Dirichlet problem for Laplace equation. *Practical instruction* Examples and student trainings.	
Literature 1. W.Strauss, Partial Differential Equations – an Introduction, John Wiley & Sons, 1992. 2. M. Nedeljkov, PDEs, Novi Sad 2004 (in Serbian).	

Weekly teaching load				Other: 0
Lectures: 4	Exercises: 2	Other forms of teaching: 0	Student research: 0	

Teaching methodology Blackboard presentations.	

Grading (maximum number of points 100)			
Pre-exam obligations	points	**Final exam**	points
Colloquia	50	Oral exam	50