Course: Numerical Analysis of Partial Differential Equations	
Course instructors: Marko Nedeljkov	
Course type: elective	
Credit points ECTS: 12	
Prerequisites: Linear PDEs	

Course objectives:
Learning basic methods of solving numericaly PDEs.

Learning outcomes:
Students will have knowledge of fiinite difference methods and other solution methods and a way to applly that knowledge.

Course description (outline):
Theoretical classes
Ellipti boundary value problems: existene and uniqueness of weak solutions. Finite di#erene approximation of ellipti boundary value problems. Finite element methods for elliptic boundary value problems. Finite di#erene approximation of evolutionary problems.

References:
1. E. Suli, An Introduction to a Numerical Analysis of PDEs, Oxford 2005.
2. *J.W. Thomas, Numerical Partial Differetial Equations, Finite Difference Methods, Springer, 1995.*

Active teaching hours : 5	Theoretical classes: 5	Practice classes: 0

Methods of teaching:
Lectures and independent work of students

Grading structure (100 points)
50 Colloquia, 50 Exam