

Course title: Computers in teaching Mathematics			
Lecturers: Dragoslav Herceg, Đurđica Takači, Đorđe Herceg			
Status: obligatory/elective elective			
ECTS: 15			
Requirements:			
Learning objectives The aim of course is to enable students to carry out independent research in the field of education, didactic-methodical approach by using computers.			
Learning outcomes After taking the course, the student should have developed: General capabilities: basic knowledge of this field, following the literature, analysis of various solutions and the choice of most adequate solution, application different educational packages. Subject-specific capabilities: Student will be able for research in science and mathematics education by using <i>GeoGebra</i> , <i>Mathematica</i> , and other software. Students will develop the ability to apply different didactical methods and approaches to different contents, by using computers.			
Syllabus <i>Theoretical instruction</i> <ul style="list-style-type: none"> • Using computers in teaching. • Assessment by computer. • The application of different software: Mathematica, Scientific Workplace, GeoGebra, Maple. • Visualization of different mathematical contents. • Using spreadsheets and databases. <i>Students research</i> Didactically research by using different packages.			
Suggested literature: <ol style="list-style-type: none"> 1. D. Herceg, I. Radeka, J. Nedić, Kroz matematiku sa <i>Mathematica</i>-om, Stylos, 2007 2. K. Surla, Đ. Herceg, S. Rapajić, <i>Mathematica</i> za fizičare i hemičare, Stylos 2005 3. N. Krejić, Đ. Herceg, Matematika i <i>Mathematica</i>, , Stylos 2008 4. Hohenwarter, M., Preiner, J., GeoGebra pomoć, Превод Д. Херцег, Ђ. Херцег, www.geogebra.org 			
Weekly teaching load			Other:
Lectures: 5	Exercises:	Other forms of teaching:	
			Student research: 5
Teaching methodology Lectures, solving problems with and without computer. Exercises and colloquiums in Computer laboratory.			
Grading (maximal number of points 100)			
Pre-exam requirements	points	Final exam	points
Activities during lectures	4	Oral exam	40
Practical teaching	40		
Colloquia	16		
Seminar papers			