

<b>Level:</b> bachelor				
<b>Course title:</b> Modern Teaching Aids (M4-28)				
<b>Status:</b> elective				
<b>ECTS:</b> 5				
<b>Requirements:</b> none				
<b>Learning objectives</b> To acquire knowledge and skills related to the use of computers and multimedia in teaching. To familiarize the students with computer algebra systems and dynamic geometry software, <i>Mathematica</i> and <i>GeoGebra</i> .				
<b>Learning outcomes</b> Students will be able to use <i>Mathematica</i> and <i>GeoGebra</i> in teaching and to connect knowledge across different topics of computer science and mathematics.				
<b>Syllabus</b> <i>Theoretical instruction</i> Introduction to <i>Mathematica</i> and <i>GeoGebra</i> . Solving mathematical problems in <i>Mathematica</i> and <i>GeoGebra</i> . Preparation of tests and exercises using the software. Visualization of mathematics. Preparation of mathematical materials, graphs and their presentation using the software. Managing marks and keeping attendance records in spreadsheets and databases. Development and publication of teaching materials on the Web and on content sharing services. <i>Practical instruction</i> Exercises follow the classes. Problems and assignments are solved in office software, <i>Mathematica</i> and <i>GeoGebra</i> . Mathematical texts, presentations and interactive materials are developed.				
<b>Weekly teaching load</b>				Other: 0
Lectures: 2	Exercises: 2	Other forms of teaching: 0	Student research: 0	