

UČNI NAČRT PREDMETA / COURSE SYLLABUS						
<b>Predmet:</b>		Pedagoška praksa 3				
<b>Course title:</b>		Teaching work experience 3				
<b>Študijski program in stopnja</b> Study programme and level		<b>Študijska smer</b> Study field		<b>Letnik</b> Academic year	<b>Semester</b> Semester	
Enoviti magistrski študijski program Pedagoška matematika		ni smeri		5	prvi	
Integrated Master's study programme Pedagogical Mathematics		none		5	first	
<b>Vrsta predmeta / Course type</b>				obvezni		
<b>Univerzitetna koda predmeta / University course code:</b>				M0580		
<b>Predavanja</b> Lectures	<b>Seminar</b> Seminar	<b>Vaje</b> Tutorial	<b>Klinične vaje</b> work	<b>Druge oblike študija</b>	<b>Samost. delo</b> Individ. work	<b>ECTS</b>
	15			25	110	5
<b>Nosilec predmeta / Lecturer:</b>		Damjan Kobal				
<b>Jeziki / Languages:</b>	<b>Predavanja / Lectures:</b>		slovenski/Slovene			
	<b>Vaje / Tutorial:</b>		slovenski/Slovene			
<b>Pogoji za vključitev v delo oz. za opravljanje študijskih obveznosti:</b>				<b>Prerequisites:</b>		
<b>Vsebina:</b>				<b>Content (Syllabus outline):</b>		

<p>Študent pridobi praktične izkušnje v okviru hospitacij in nastopov. Po dogovoru učiteljji matematike kot mentorji spremljajo in vodijo delo študenta v obliki hospitacij in nastopov. Delo je koordinirano in poteka v stalnem sodelovanju med učiteljem na fakulteti in učiteljem mentorjem na srednji šoli. Izkušnje s hospitacij se diskutirajo in analizirajo. Študent strnjeno prisostvuje enemu tednu (okrog 25 šolskih ur) učiteljskega dela in pri tem izvede vsaj osem ur nastopov. Praksa poteka v okviru gimnazijskih ali drugih srednješolskih programov.</p> <p>Študent lahko v dogovoru z izvajalcem predmeta obveznosti delno opravi tudi z drugimi oblikami praktičnega pedagoškega dela. V okviru predmeta se študenti lahko udeležijo strokovnih srečanj.</p>	<p>Students acquire field experiences with classroom observation and instruction. Mathematics teacher guides a student to gain real classroom experiences. Students observe classroom teaching and under teacher's observation also teach themselves. Teaching is discussed and analysed. In field practice is carefully designed in collaboration with high school teacher advisor and university teacher. Student accompanies a week of high school teacher's work (about 25 school hours) and within that teaches at least eight hours.</p> <p>In agreement with the course teacher, a student can partially fulfil course obligations also by other specific practical pedagogical work. Within the course students can attend professional meetings.</p>
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#### **Temeljni literatura in viri / Readings:**

<p>H. Freudenthal: Mathematics as an Educational Task, Springer, Berlin, 1972.</p> <p>S. G. Krantz: How to Teach Mathematics, 2nd edition, AMS, Providence, 1999.</p> <p>F. Pediček: Edukacija danes, Obzorja, Maribor, 1994.</p> <p>G. Polya: Mathematics and Plausible Reasoning, Princeton Univ. Press, Princeton, 1990.</p> <p>Srednješolski učbeniki.</p> <p>H. W. Heymann: Why Teach Mathematics : A Focus on General Education, Springer, New York, 2004.</p>
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#### **Cilji in kompetence:**

<p>Pedagoška praksa v šoli je obvezni sestavni del pedagoškega usposabljanja. Organizira in izvaja se po načelu reflektivne prakse in študentom omogoča integracijo predmetno-vsebinskega in pedagoško-profesionalnega znanja s postopnim vpeljevanjem v poučevanje in poklic učitelja.</p>
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#### **Objectives and competences:**

<p>In field experiences are an obligatory part of pedagogical training. It is organized to be as reflective and creative as possible. It designed to promote a successful interaction between content and didactical principles of teaching. Prospective teachers learn about the problems of modern mathematics teaching.</p>
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Slušatelji se ob praktičnem delu v razredu spoznajo s problematiko sodobnega poučevanja in različnih oblik dela pri pouku matematike.

**Predvideni študijski rezultati:**

Poznavanje in razumevanje zapletenih odnosov praktičnega matematičnega poučevanja. Uporaba praktičnih izkušenj pri oblikovanju učiteljskih nazorov.

**Intended learning outcomes:**

Students acquire the ability to understand and handle the complexity of modern teaching of mathematics. Practical experiences are ingrained into their teaching principles.

**Metode poučevanja in učenja:**

Hospitacije, nastopi, diskusije, konzultacije

**Learning and teaching methods:**

Classroom observation, instruction, discussions, consultations

**Načini ocenjevanja:**

Hospitacije, nastopi, poročilo  
Zahtevana ustrezna sposobnost (strokovne) komunikacije v slovenskem jeziku.

ocene: opravil / ni opravil

Delež (v %) /

Weight (in %)

**Assessment:**

Classroom observation, instruction, report  
Adequate ability of professional communication in Slovenian is required.

Grading: pass/fail

100%

**Reference nosilca / Lecturer's references:**

KOBAL, Damjan. Technology and simple math ideas inspire teaching. V: ICME - 12 : the 12th International Congress on Mathematical Education, July 8-15, 2012, COEX, Seoul, Korea. Cheongju: Korea National University of Education, 2012, 7 str. [COBISS.SI-ID 17151577]

KOBAL, Damjan, et al. Integrating algebra and geometry with complex numbers. V: International Seminar in Mathematics Education 2011. Park City: Park City Mathematics Institute - Institute for Advanced Study, cop. 2013, 9 str. [COBISS.SI-ID 17152345]

KOBAL, Damjan. Iluzija objektivnosti ali objektivnost odgovornosti. Obzornik za matematiko in fiziko, ISSN 0473-7466, 2007, letn. 54, št. 1, str. 18-28. [COBISS.SI-ID 14302297]

KOBAL, Damjan. Inner product space and circle power. Publicationes mathematicae, ISSN 0033-3883, 2012, vol. 81, fasc. 1-2, str. 1-9. [COBISS.SI-ID 16336473]

KOBAL, Damjan. Bijections preserving invertibility of differences of matrices on  $H$  [sub]  $n$ . Acta mathematica Sinica, English series, ISSN 1439-8516, 2008, vol. 24, no. 10, str. 1651-1654. [COBISS.SI-ID 15588441]

KOBAL, Damjan. Preserving diagonalisability on upper triangular matrices. Linear and Multilinear Algebra, ISSN 0308-1087, 2006, vol. 54, no. 3, str. 189-194. [COBISS.SI-ID 13971801]