

UČNI NAČRT PREDMETA / COURSE SYLLABUS						
<b>Predmet:</b>	Seminar 1					
<b>Course title:</b>	Seminar 1					
<b>Študijski program in stopnja</b> <b>Study programme and level</b>	<b>Študijska smer</b> <b>Study field</b>		<b>Letnik</b> <b>Academic year</b>	<b>Semester</b> <b>Semester</b>		
Enoviti magistrski študijski program Pedagoška matematika	ni smeri		3	drugi		
Integrated Master's study programme Pedagogical Mathematics	none		3	second		
<b>Vrsta predmeta / Course type</b>				obvezni		
<b>Univerzitetna koda predmeta / University course code:</b>				M0526		
<b>Predavanja</b> <b>Lectures</b>	<b>Seminar</b> <b>Seminar</b>	<b>Vaje</b> <b>Tutorial</b>	<b>Klinične vaje</b> <b>work</b>	<b>Druge oblike študija</b>	<b>Samost. delo</b> <b>Individ. work</b>	<b>ECTS</b>
	30				60	3
<b>Nosilec predmeta / Lecturer:</b>		doc. George Mejak, prof. Bor Plestenjak, prof. Sašo Strle, prof. Tomaž Košir				
<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>Vodja seminarja bo pripravil zadostno število krajših samostojnih tem in jih skupaj s potrebnim gradivom razdelil med študente. Gradivo samo mora zadoščati za pripravo seminarske naloge, lahko pa študenti sami poiščejo še dodatne vire.</p>	<p>Seminar leader prepares a sufficient number of short independent topics. Topics are handed out to students along with necessary literature. The handouts have to suffice for the preparation of the seminar, however students can look for additional sources.</p>
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**Temeljna literatura in viri / Readings:**

<p>gradivo, ki ga pripravi vodja seminarja S. Krantz: A primer of mathematical writing, American Mathematical Society, 1997.</p>
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**Cilji in kompetence:**

<p>Predmet je namenjen temu, da se študenti naučijo pripravljati krajše seminarje. V okviru predmeta se bodo na podlagi lastnih izkušenj in opazovanja drugih usposobili za nastopanje pred razredom, izdelovanje preglednih prosojnic ipd. Naučili se bodo, kaj je pomembno za uspešno predstavitev in uspešno napisano seminarsko nalogo.</p>
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**Objectives and competences:**

<p>The purpose of the course is to teach a student how to prepare a short presentation of a mathematical topic. As a part of the course the student will based on own experience and observing peers, acquire the ability to teach a class and prepare appropriate slides. They will learn what makes an understandable presentation and clearly written and structured seminar work.</p>
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**Predvideni študijski rezultati:**

<p>Študent se nauči pripraviti krajšo predstavitev in napisati seminarsko nalogo. Pridobljene izkušnje mu bodo v pomoč v času študija pri drugih predmetih in kasneje v delovnem okolju.</p>
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**Intended learning outcomes:**

<p>Student learns to prepare a short presentation and to write a seminar paper. Gained experience will be of use during the course of study for other courses and later for work.</p>
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**Metode poučevanja in učenja:**

**Learning and teaching methods:**

Vsak študent pripravi dve predstavitvi, vsaka predstavitev traja eno šolsko uro, od tega bo 30 minut namenjeno predstavitvi, 15 minut pa razpravi. Bolj kot na matematični vsebini bo poudarek na sami izvedbi seminarja in na izdelanem pisnem izdelku. Vsak študent mora napisati še krajšo seminarsko nalogo.	Student prepares two presentations in the duration of one school hour, where 30 minutes is used for presentation and 15 minutes for a discussion and question session. The emphasis is not on the mathematics of the topic but rather on the clear and well structured presentation of ideas and written work. Student has to write a short seminar work.
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Delež (v %) /

**Načini ocenjevanja:**

Weight (in %) **Assessment:**

Predstavitev seminarske teme Seminarska naloga		Presentation of the seminar Seminar paper
ocene: 1-5 (negativno), 6-10 (pozitivno) (po Statutu UL)	50% 50%	Grading: 6-10 pass, 1-5 fail (according to the rules of University of Ljubljana)

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

Tomaž Košir:

- KOŠIR, Tomaž, OBLAK, Polona. On pairs of commuting nilpotent matrices. Transformation groups, ISSN 1083-4362, 2009, vol. 14, no. 1, str. 175-182 [COBISS.SI-ID 15077977]
- CVETKO-VAH, Karin, KOKOL-BUKOVŠEK, Damjana, KOŠIR, Tomaž, KUDRYAVTSEVA, Ganna. Semitransitive subsemigroups of the singular part of the finite symmetric inverse semigroup. Acta mathematica Hungarica, ISSN 0236-5294, 2011, vol. 131, no. 1-2, str. 1-24 [COBISS.SI-ID 15842905]
- GRUNENFELDER, Luzius, KOŠIR, Tomaž, OMLADIČ, Matjaž, RADJAVI, Heydar. Finite groups with submultiplicative spectra. Journal of Pure and Applied Algebra, ISSN 0022-4049. [Print ed.], 2012, vol. 216, iss. 5, str. 1196-1206 [COBISS.SI-ID 16183385]

George Mejak:

- MEJAK, George. Elasto-plastic torsion of composite bars with imperfect bonding. V: BATHE, Klaus-Jürgen (ur.). Computational fluid and solid mechanics : proceedings, Second MIT Conference on Computational Fluid and Solid Mechanics, June 17-20, 2003. Oxford: Elsevier Science, 2003, str. 436-438 [COBISS.SI-ID 12503641]
- MEJAK, George. Two scale finite element method. V: 21st International congress of theoretical and applied mechanics, 21st ICTAM 2004, Warsaw, Poland, August 15-21, 2004. CD-ROM proceedings. Warszawa: International union of theoretical and applied mechanics: = IUTAM, 2004, sM15\_11334 [COBISS.SI-ID 13217113]
- MEJAK, George. Eshebly tensors for a finite spherical domain with an axisymmetric inclusion. European journal of mechanics. A, Solids, ISSN 0997-7538. [Print ed.], 2011, vol. 30, iss. 4, str. 477-

Bor Plestenjak:

– PLESTENJAK, Bor, BAREL, Marc van, CAMP, Ellen van. A Cholesky LR algorithm for the positive definite symmetric diagonal-plus-semiseparable eigenproblem. V: CHING, Wai-Ki (ur.). Second international conference on structured matrices : Hong Kong Baptist University, 08-11 June 2006, (Linear algebra and its applications, ISSN 0024-3795, Vol. 428, Issues 2-3, 2008). New York: North Holland, 2008, vol. 428, iss. 2-3, str. 586-599 [COBISS.SI-ID 14475097]

– MUHIČ, Andrej, PLESTENJAK, Bor. On the quadratic two-parameter eigenvalue problem and its linearization. Linear Algebra and its Applications, ISSN 0024-3795. [Print ed.], 2010, vol. 432, iss. 10, str. 2529-2542 [COBISS.SI-ID 15469913]

– GHEORGHIU, C. I., HOCHSTENBACH, Michiel E., PLESTENJAK, Bor, ROMMES, Joost. Spectral collocation solutions to multiparameter Mathieu's system. Applied mathematics and computation, ISSN 0096-3003. [Print ed.], 2012, vol. 218, iss. 24, str. 11990-12000 [COBISS.SI-ID 16484185]

Sašo Strle:

– OWENS, Brendan, STRLE, Sašo. A characterisation of the  $n \times n$  form and applications to rational homology spheres. Mathematical research letters, ISSN 1073-2780, 2006, vol. 13, iss. 2, str. 259-271 [COBISS.SI-ID 13873241]

– GRIGSBY, J. Elisenda, RUBERMAN, Daniel, STRLE, Sašo. Knot concordance and Heegaard Floer homology invariants in branched covers. Geometry & topology, ISSN 1364-0380, 2008, vol. 12, iss. 4, str. 2249-2275 [COBISS.SI-ID 14892121]

– OWENS, Brendan, STRLE, Sašo. A characterization of the  $\mathbb{Z}^n \oplus \mathbb{Z}(\delta)$  lattice and definite nonunimodular intersection forms. American journal of mathematics, ISSN 0002-9327, 2012, vol. 134, no. 4, str. 891-913 [COBISS.SI-ID 16408153]