

UČNI NAČRT PREDMETA / COURSE SYLLABUS (leto / year 2016/17)						
<b>Predmet:</b>		Diplomski seminar				
<b>Course title:</b>		Diploma seminar				
<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	
Univerzitetni študijski program Finančna matematika		ni smeri		3	prvi in drugi	
First cycle academic study programme Financial Mathematics		none		3	first and second	
<b>Vrsta predmeta / Course type</b>				obvezni / compulsory		
<b>Univerzitetna koda predmeta / University course code:</b>				M0359		
<b>Predavanja</b> Lectures	<b>Seminar</b> Seminar	<b>Vaje</b> Tutorial	<b>Klinične vaje</b> work	<b>Druge oblike</b> študija	<b>Samost. delo</b> Individ. work	<b>ECTS</b>
	60				150	7
<b>Nosilec predmeta / Lecturer:</b>		prof. dr. Janez Bernik, prof. dr. 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>		
Vpis v letnik študija.				Enrolment in the programme.		
<b>Vsebina:</b>				<b>Content (Syllabus outline):</b>		

Vodja seminarja bo skupaj z drugimi učitelji na programu Finančna matematika in na Oddelku za matematiko pripravil zadostno število krajših samostojnih tem iz vsebin na programu iz finančne matematike, praviloma skupaj z osnovnim gradivom. Študenti sami poiščejo še dodatne vire.

With the help of all the lecturers of the study program and other teachers from Department of mathematics, the seminar chair prepares a sufficient number of short independent topics with the relevant basic literature. Students, however, can look for additional sources.

#### **Temeljni literatura in viri / Readings:**

gradivo, ki ga pripravi vodja seminarja

S. Krantz: A primer of mathematical writing, American Mathematical Society, 1997.

#### **Cilji in kompetence:**

Predmet je namenjen izdelavi in predstavitvi seminarske naloge. Izdelava naloge se začne in večinoma opravi v prvem semestru, potem pa jo študent dokonča in zagovarja v drugem semestru. Predmet je namenjen tudi spoznavanju z neposredno prakso, saj se bodo teme navezovala na uporabo v finančnem in ekonomskem sektorju. K sodelovanju pri organizaciji seminarja bomo povabili tudi zaposlene iz ustanov in delovnih organizacij iz finančnega sektorja.

#### **Objectives and competences:**

The purpose of the course is a preparation and a final presentation of the final seminar work. The preparation of the seminar work starts and is mostly done in the first semester, the second semester is used for the finalization. The course is designed specifically to learn direct practice, as the themes are taken from practice. We will invite employees of institutions and organizations from financial sector to participate in the organization of the seminar.

#### **Predvideni študijski rezultati:**

Znanje in razumevanje: Študent se nauči uporabe literature, tako tiskane kot tiste s svetovnega spleta, in na njeni osnovi pripraviti krajšo predstavitev in napisati seminarsko nalogo.

Uporaba: Pridobljene izkušnje mu bodo v pomoč v času študija pri drugih predmetih in kasneje v delovnem okolju.

#### **Intended learning outcomes:**

Knowledge and understanding: Student learn to look for additional sources in literature and internet and learn how to prepare a short presentation and write a seminar work.

Application: Gained experience will be of use during the course of study for other courses and later for work.

Reflection: The ability to connect new skills to

Refleksija: Povezovanje pridobljenih spretnosti s strokovnim znanjem.

Prenosljive spretnosti – niso vezane le na en predmet: Pridobljene izkušnje mu bodo v pomoč pri vseh drugih predmetih, ki zahtevajo predstavitve ali izdelavo domače naloge.

the expertise.

Transferable skills: Gained experience will be of use during the course of study for other courses that require presentation or homework.

#### Metode poučevanja in učenja:

Vsak študent pripravi dve predstavitvi, vsaka predstavitev traja eno šolsko uro, od tega bo 30 minut namenjeno predstavitvi, 15 minut pa razpravi. Vsak študent mora napisati seminarsko nalogo. Zagovor seminarske naloge predstavlja zaključek študija, zat

#### Learning and teaching methods:

Each student prepares two presentations in the duration of 30 minutes which is followed by 15 minutes for a discussion and question session. Each student has to write a short seminar work. The final presentation of the seminar work presents a formal end

#### Načini ocenjevanja:

Delež (v %) /

Weight (in %)

#### Assessment:

Način:	Delež (v %) / Weight (in %)	Type:
Ocena predstavitev		Presentation Seminar paper
Ocena seminarske naloge	50%	grading: 1-5 (fail), 6-10 (pass) (according to the Statute of UL)
ocene: 1-5 (negativno), 6-10 (pozitivno) (po Statutu UL)	50%	

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

Tomaž Košir:

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]

BUCKLEY, Anita, KOŠIR, Tomaž. Plane curves as Pfaffians. Annali della Scuola normale superiore di Pisa, Classe di scienze, ISSN 0391-173X, 2011, vol. 10, iss. 2, str. 363-388. [COBISS.SI-ID 15928409]

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]

Janez Bernik:

BERNIK, Janez, MASTNAK, Mitja. Lie algebras acting semitransitively. *Linear Algebra and its Applications*, ISSN 0024-3795. [Print ed.], 2013, vol. 438, iss. 6, str. 2777-2792. [COBISS.SI-ID 16553561]

BERNIK, Janez, MARCOUX, Laurent W., RADJAVI, Heydar. Spectral conditions and band reducibility of operators. *Journal of the London Mathematical Society*, ISSN 0024-6107, 2012, vol. 86, no. 1, str. 214-234. [COBISS.SI-ID 16357721]

BERNIK, Janez, MASTNAK, Mitja, RADJAVI, Heydar. Positivity and matrix semigroups. *Linear Algebra and its Applications*, ISSN 0024-3795. [Print ed.], 2011, vol. 434, iss. 3, str. 801-812. [COBISS.SI-ID 15745625]