UČNI NAČRT PREDMETA / COURSE SYLLABUS (leto / year 2017/18)		
Predmet:	Seminar 1	
Course title:	Seminar 1	

Študijski program in stopnja Study programme and level	**Študijska smer Study field**	**Letnik Academic year**	**Semester Semester**
Doktorski študijski program Matematika in fizika	Matematika	1	prvi in drugi
Doctoral study programme Mathematics and Physics	Mathematics	1	first and second

Vrsta predmeta / Course type	obvezni / compulsory

Univerzitetna koda predmeta / University course code: M3129

Predavanja Lectures	**Seminar Seminar**	**Vaje Tutorial**	**Klinične vaje work**	**Druge oblike študija**	**Samost. delo Individ. work**		**ECTS**
	30				150		6

Nosilec predmeta / Lecturer:	prof. dr. Matej Brešar, prof. dr. Miran Černe, prof. dr. Primož Potočnik

Jeziki / Languages:	**Predavanja / Lectures:**	slovenski / Slovene, angleški / English
	Vaje / Tutorial:	slovenski / Slovene, angleški / English

Pogoji za vključitev v delo oz. za opravljanje študijskih obveznosti:	**Prerequisites:**
Vpis v letnik študija.	Enrolment in the programme.

Vsebina:	**Content (Syllabus outline):**

Študent se priključi enemu od raziskovalnih seminarjev, ki potekajo na Oddelku za matematiko. Pripravi vsaj eno samostojno predavanje, v katerem predstavi svoje originalne raziskovalne rezultate ali pa druge rezultate pomembne za njegovo raziskovalno delo.	The student joins one of the research semiars that are organised at the department. At least once a year, he or she prepares a seminar talk, in which his or her original research results or other results important for his or her research are presented.

Temeljni literatura in viri / Readings:

Študent literaturo izbere v sodelovanju s svojim mentorjem in vodjo seminarja.

The literature is chosen in cooperation with the mentor and the leader of the research seminar.

Cilji in kompetence:

Objectives and competences:

Študent pod vodstvom mentorja, ob poslušanju svojih kolegov in s pripravo svojega seminarja pridobi izkušnje pri predstavljanja znanstvenih dosežkov širši matematični javnosti.	The student, under the supervision of his mentor, by attending the talks of his colleagues and by preparing his own presentation, gains experience in presenting scientific achievements to the general mathematical community.

Predvideni študijski rezultati:

Intended learning outcomes:

Znanje in razumevanje: Seznanitev s širšim raziskovalnim področjem in usvajanje veščine priprave kakovostnega znanstvenega predavanja. Uporaba: Predstavljanje raziskovalnih dosežkov je ena od temeljnih nalog raziskovalca in je uporabno tako pri komunikaciji znotraj raziskovalne skupnosti kot pri popularizaciji znanosti ter predstavljanju znanstvnih dosežkov širši javnosti. Refleksija: Pregled nad širšim raziskovalnim področjem, sposobnost vključevanja v delo raziskovalne skupine in izkušnja javnega nastopa pred raziskovalno javnostjo.	Knowledge and understanding: The student will get acquainted with the broader research area and will acquire the skill of preparing a high quality public presentation. Application: Presenting research results is one of the fundamental missions of a researcher and is essential both, when communicating within the research community as well as in the popularisation of science and dissemination of scientific achievements within general public. Reflection: Overview of the broader research area, ability of working within a research group, experience of public presentations. Transferable skills: The ability of presenting

Prenosljive spretnosti: Sposobnost javnega nastopanja pred raziskovalno javnostjo.	research results within the scientific community.

Metode poučevanja in učenja:

Samostojni študij in konzultacije.

Learning and teaching methods:

Individual study and consultations.

Načini ocenjevanja:	Delež (v %) / Weight (in %)	**Assessment:**
Seminarsko predavanje. Ocene: opravil, ni opravil	100%	Seminar talk. Grades: pass, fail.

Reference nosilca / Lecturer's references:

Matej Brešar:

BREŠAR, Matej. Functional identities on tensor products of algebras. Journal of algebra, ISSN 0021-8693, 2016, vol. 455, str. 108-136. [COBISS.SI-ID 17625945]

BREŠAR, Matej. Algebras in which non-scalar elements have small centralizers. Linear and Multilinear Algebra, ISSN 0308-1087, 2015, vol. 63, no. 9, str. 1864-1871. [COBISS.SI-ID 17160537]

BREŠAR, Matej, ŠPENKO, Špela. Functional identities of one variable. Journal of algebra, ISSN 0021-8693, 2014, vol. 401, str. 234-244.[COBISS.SI-ID 16842329]

Miran Černe:

ČERNE, Miran, ZAJEC, Matej. Boundary differential relations for holomorphic functions on the disc. Proceedings of the American Mathematical Society, ISSN 0002-9939, 2011, vol. 139, no. 2, str. 473-484. [COBISS.SI-ID 15710553]

ČERNE, Miran, FLORES, Manuel. On Beurling's boundary differential relation. Israel journal of mathematics, ISSN 0021-2172, 2014, vol. 199, iss. 2, str. 831-840. [COBISS.SI-ID 17144153]

ČERNE, Miran. Beurling's boundary differential relations on multiply connected domains. Journal of mathematical analysis and applications, ISSN 0022-247X. [Print ed.], 2015, vol. 428, iss. 1, str. 544-562. [COBISS.SI-ID 17270873]

Primož Potočnik:

BERČIČ, Katja, POTOČNIK, Primož. Two-arc-transitive two-valent digraphs of certain orders. Ars mathematica contemporanea, ISSN 1855-3966. [Tiskana izd.], 2016, vol. 11, no. 1, str. 127-146. [COBISS.SI-ID 1538308036]

POTOČNIK, Primož, WILSON, Stephen. Linking rings structures and semisymmetric graphs: Cayley constructions. European journal of combinatorics, ISSN 0195-6698, 2016, vol. 51, str. 84-98.

[COBISS.SI-ID 17462361]

POTOČNIK, Primož, SPIGA, Pablo, VERRET, Gabriel. Bounding the order of the vertex-stabiliser in 3-valent vertex-transitive and 4-valent arc-transitive graphs. Journal of combinatorial theory. Series B, ISSN 0095-8956, 2015, vol. 111, str. 148-180. [COBISS.SI-ID 1537132228]