UČNI NAČRT PREDMETA / COURSE SYLLABUS (leto / year 2017/18)

Predmet:	Komuniciranje v matematiki
Course title:	Communicating mathematics

Študijski program in stopnja Study programme and level	Študijska smer Study field	Letnik Academic year	Semester Semester
Visokošolski strokovni študijski program Praktična matematika	ni smeri	1	drugi
First cycle professional study programme Practical Mathematics	none	1	second

Vrsta predmeta / Course type	obvezni / compulsory

Univerzitetna koda predmeta / University course code:	M0426

Predavanja Lectures	Seminar Seminar	Vaje Tutorial	Klinične vaje work	Druge oblike študija	Samost. delo Individ. work		ECTS
	30				60		3

Nosilec predmeta / Lecturer:	prof. dr. Andrej Bauer

Jeziki / Languages:	Predavanja / Lectures:	slovenski / Slovene
	Vaje / Tutorial:	slovenski / Slovene

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

Vsebina:	Content (Syllabus outline):

Študenti se bodo naučili pripraviti krajše seminarje. V okviru predmeta se bodo na podlagi lastnih izkušenj in opazovanja drugih usposobili za nastopanje pred razredom, izdelovanje predstavitev, poročil in podobnih izdelkov. Naučili se bodo, kaj je pomembno za uspešno predstavitev in uspešno napisano seminarsko nalogo. V praksi bodo spoznali in usvojili uporabo računalniških orodij za pripravo predstavitev.

Vodja seminarja bo pripravil zadostno število krajših samostojnih tem in jih skupaj s potrebnim gradivom razdelil med študente. Teme bodo izbrane iz vsebin, za katere zadošča znanje prvega letnika študija.

Students will learn to prepare short seminar presentations. They will gain the experience how to present it and prepare the corresponding documents. They will learn about the structure and basic components of a presentation. They will also learn and acquire the skills to use the presentation making tools.

The seminar leader will prepare a collection of topics and supporting materials from which each student will select his/her seminar topic. The topics will consider the knowledge of students.

Temeljni literatura in viri / Readings:

gradivo, ki ga pripravi vodja seminarja

Krantz, S.G. A primer of mathematical writing. AMS, 1998.

Borwein, J., Rocha, E.M., Rodrigues, J.F. Communicating Mathematics in the Digital Era. CRC Press, 2008.

Mittelbach, F., Goossens, M., Braams, J., Carlisle, D. The LaTeX Companion (Tools and Techniques for Computer Typesetting). Addison-Wesley, 2. izdaja, 2004.

Kolin, P.C. Successful Writing at Work. Cengage Learning, 10. izdaja, 2012.

Steenrod, N.E., Halmos, P.R., Schiffer, M.M., Dieudonne, J.A. How to Write Mathematics. AMS, 1973.

Paradis, J.G., Zimmerman, M.L. The MIT Guide to Science and Engineering Communication. MIT, 2. izdaja, 2002.

Montgomery, S.L. The Chicago Guide to Communicating Science. University of Chicago Press, 2002.

Cilji in kompetence: **Objectives and competences:**

Študentje bodo spoznali zgradbo in sestavine predstavitev, se usposobili za njih pripravo z ustreznimi orodji ter za samo izvedbo predstavitve.	Students acquire knowledge about the structure and basic components of presentations. They will learn how to prepare and present them and, using appropriate tools, how to produce the corresponding documents.

Predvideni študijski rezultati: **Intended learning outcomes:**

Znanje in razumevanje: Študent se nauči 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. 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 predstavitev ali izdelavo domače naloge.	Knowledge and understanding: Students learn to prepare, present and document a short presentation on selected topic. Application: The acquired skills will be useful during the study and later in his/her professional activities. Reflection: Connecting the acquired skills with the professional knowledge. Transferable skills: The acquired skills can be useful in all other courses that require from students reporting about their activities.

Metode poučevanja in učenja: **Learning and teaching methods:**

Na začetku vodja seminarja pripravi nekaj uvodnih predavanj. Študenti si izberejo teme.V nadaljevanju vsak študent pripravi vsaj eno predstavitev. Ustvariti mora tudi nekaj krajših izdelkov. Poudarek je na sami izvedbi predstavitve na seminarju in na kakovosti izdelkov.	At the beginning the seminar leader gives some introductory lectures. Students select their seminar topics. Each student prepares a public presentation on his/her topic and the corresponding documents. The emphasis is on the public presentation and the quality of the produced documents.

Načini ocenjevanja:	Delež (v %) / Weight (in %)	Assessment:
oddani izdelki (prosojnice, poročilo/članek, poster, spletna stran)	50%	documents (presentation slides, report/paper, poster, web page)

predstavitev in zagovor izdelkov Ocene: 1-5 (negativno), 6-10 (pozitivno) (po Statutu UL)	50%	public presentation Grading: 1-5 (fail), 6-10 (pass) (according to the Statute of UL)

Reference nosilca / Lecturer's references:

Andrej Bauer:

AWODEY, Steve, BAUER, Andrej. Propositions as [Types]. Journal of logic and computation, ISSN 0955-792X, 2004, vol. 14, no. 4, str. 447-471. [COBISS.SI-ID 13374809]

BAUER, Andrej, SIMPSON, Alex. Two constructive embedding-extension theorems with applications to continuity principles and to Banach-Mazur computability. Mathematical logic quarterly, ISSN 0942-5616, 2004, vol. 50, no. 4/5, str. 351-369. [COBISS.SI-ID 13378649]

BAUER, Andrej. A ralationship between equilogical spaces and Type Two Effectivity. Mathematical logic quarterly, ISSN 0942-5616, 2002, vol. 48, suppl. 1, str. 1-15. [COBISS.SI-ID 12033369]