UČNI NAČRT PREDMETA / COURSE SYLLABUS (leto / year 2017/18)			
Predmet:	Matematično izražanje v angleškem jeziku		
Course title:	Expressing mathematics in English		

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	prvi in drugi
First cycle professional study programme Practical Mathematics	none	1	first and second

Vrsta predmeta / Course type		izbirni / elective

Univerzitetna koda predmeta / University course code:	M0448

Predavanja Lectures	**Seminar Seminar**	**Vaje Tutorial**	**Klinične vaje work**	**Druge oblike študija**	**Samost. delo Individ. work**	**ECTS**
60		**60**			**120**	**8**

Nosilec predmeta / Lecturer:	prof. dr. Jaka Smrekar

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):**

Osnovni pojmi: števila in aritmetika, relacije, geometrija, algebra, logika, funkcije Osnovno izražanje: opisovanje, razlaganje, dokazovanje Razumevanje matematičnega besedila: poljudno matematično besedilo, učbenik, raziskovalni članek Tvorba matematičnega besedila: kombiniranje besed, simbolov in enačb, slovnica, organizacija besedila, stil Posebna besedila: seminarsko delo, diplomsko delo Osnovni pojmi, drugi del: zaporedja in vrste, zveznost, odvod in integral	Basic concepts: Numbers and arithmetic, relations, geometry, algebra, logic, function Rudimentary expressions: description, explanation, proof Comprehension of written mathematics: popular mathematics, textbook, research paper Writing mathematics: combining words, symbols, and equations, grammar issues, organization, style Special texts: seminar paper, bachelor thesis Basic concepts 2: sequences and series, continuity, differential and integral calculus

Temeljni literatura in viri / Readings:

Erwin Kreyszig, Herbert Kreyszig, Edward J. Norminton: Advanced engineering mathematics, 10th edition, J. Wiley & Sons, 2011.

Ulrich Daepp, Pamela Gorkin: Reading, writing, and proving : a closer look at mathematics, 2nd edition, Springer, 2011.

Robert Barrass: Scientists must write : a guide to better writing for scientists, engineers and students, Chapman and Hall, 1978.

Georg Glaeser: Geometry and its Applications in Arts, Nature and Technology, Springer Wien New York, Edition Angewandte, 2012.

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

Študenti spoznajo angleške izraze za temeljne matematične pojme, naučijo se osnovnega matematičnega izražanja v angleškem jeziku, obravnavajo različne vrste matematičnih tekstov in se naučijo tvoriti matematično besedilo v angleškem jeziku na univerzitetnem nivoju.

Students get acquainted with the English terms for basic mathematical concepts. They learn the basics of expressing mathematics in English, study various types of mathematical texts, and learn how to create mathematical texts in English at university level.

Predvideni študijski rezultati:

Znanje in razumevanje:

Poznavanje osnovnih angleških matematičnih izrazov. Razumevanje in tvorba angleškega matematičnega besedila.

Uporaba:

Velika večina matematične literature v svetu je v angleškem jeziku. Za matematika je branje in pisanje v angleščini praktično neizogibno.

Refleksija:

Povezovanje matematičnega izražanja z izražanjem v tujem jeziku.

Prenosljive spretnosti – niso vezane le na en predmet:

Branje in pisanje v angleškem jeziku.

Intended learning outcomes:

Knowledge and understanding:

Knowledge of basic mathematical expressions in English. Reading comprehension and writing of mathematical texts in English.

Application:

A vast majority of the World's mathematical literature is in the English language. For a mathematician, reading and writing in English is virtually unavoidable.

Reflection:

Integrating mathematical expression with expression in a foreign language.

Transferable skills:

Reading and writing in English.

Metode poučevanja in učenja:

predavanja, seminar, domače naloge, konzultacije

Learning and teaching methods:

Lectures, seminar, homework, consultations

Načini ocenjevanja:	Delež (v %) / Weight (in %)	Assessment:
Način (pisni izpit, ustno izpraševanje, naloge, projekt): izdelava in predstavitev seminarskega dela (pogoj za pristop k pisnemu izpitu) pisni izpit Ocene: 1-5 (negativno), 6-10 (pozitivno) (po Statutu UL)	 50% 50%	Type (examination, oral, coursework, project): seminar project (paper and presentation), the completion thereof is required prior to sitting the written exam written exam Grading: 1-5 (fail), 6-10 (pass) (according to the Statute of UL)

Reference nosilca / Lecturer's references:

SMREKAR, Jaka. Homotopy type of mapping spaces and existence of geometric exponents. Forum mathematicum, ISSN 0933-7741, 2010, vol. 22, no. 3, str. 433-456. [COBISS.SI-ID 15638105]

SMREKAR, Jaka. Periodic homotopy and conjugacy idempotents. Proceedings of the American Mathematical Society, ISSN 0002-9939, 2007, vol. 135, no. 12, str. 4045-4055. [COBISS.SI-ID 14382681]

SMREKAR, Jaka, YAMASHITA, Atsushi. Function spaces of CW homotopy type are Hilbert manifolds. Proceedings of the American Mathematical Society, ISSN 0002-9939, 2009, vol. 137, no. 2, str. 751-759. [COBISS.SI-ID 14965849]

Nosilec University of Cambridge Certificate of Proficiency in English, University of Cambridge, June 1994.