



Univerza v Mariboru

Fakulteta za naravoslovje
in matematiko

UČNI NAČRT PREDMETA / COURSE SYLLABUS

| | |
|----------------------|--|
| Predmet: | Praktično usposabljanje za poučevanje matematike II |
| Course title: | Pedagogical practice for teaching mathematics II |

| Študijski program in stopnja Study programme and level | Študijska smer Study field | Letnik Academic year | Semester Semester |
|---|-------------------------------|-------------------------|----------------------|
| Izobraževalna matematika – enopredmetna, 2. Stopnja | | 2. | 4. |
| Educational mathematics - single-major, 2 nd cycle | | 2. | 4. |

Vrsta predmeta / Course type

obvezni / compulsory

Univerzitetna koda predmeta / University course code:

| Predavanja Lectures | Seminar Seminar | Sem. vaje Tutorial | Lab. vaje Laboratory work | Teren. vaje Field work | Samost. delo Individ. work | ECTS |
|------------------------|--------------------|-----------------------|------------------------------|---------------------------|-------------------------------|------|
| | 6 | | 8 | | 196 | 7 |

Nosilec predmeta / Lecturer:

David GAJSER

Jeziki /

Languages:

Predavanja /

Lectures:

SLOVENSKO/SLOVENE

Vaje / Tutorial:

SLOVENSKO/SLOVENE

Pogoji za vključitev v delo oz. za opravljanje študijskih obveznosti:

Jih ni.

Prerequisites:

None.

Vsebina:

- Učni načrti za srednje šole.
- Nastopi v šoli.
- Cilji pedagoške prakse v srednji šoli.
- Pedagoška praksa (praviloma na gimnaziji): priprava, nastopi, hospitacije, analize, pedagoška dokumentacija, temeljni šolski pravilniki, pedagoško delo v razredu in druge učiteljeve zadalžitve.
- Analiza nastopov in pedagoške prakse.
- Nastopi in hospitacije v šoli med letom,

Content (Syllabus outline):

- Mathematics curriculum for secondary school.
- Pedagogical class appearances in school.
- Goals of pedagogical practice in secondary school.
- Pedagogical practice (preferably at gymnasium): preparation, instructions, observations, analysis, pedagogical documentation, school legislation, pedagogical class management and other pedagogical obligations.

- Urejanje in oddaja Dnevnika pedagoške prakse.

- Evaluation of class appearances and pedagogical class practice.
- Pedagogical class appearances in school
- Arranging the Diary of pedagogical practice.

Temeljni literatura in viri / Readings:

A. S. Posamentier [et al.], *Teaching Secondary Mathematics: Techniques and Enrichment Units. 8th Edition*, Pearson Prentice Hall, 2009.

B. Marentič Požarnik, *Psihologija učenja in pouka, prenovljena izdaja*, DZS, 2018.

Učni načrti za srednje šole.

Učbeniki in druga učna gradiva za srednje šole.

Portal Razlagamo.si: www.razlagamo.si

Šolska zakonodaja.

Cilji in kompetence:

Usposobiti študente za: načrtovanje, izvajanje in analizo pouka; vrednotenje šolskega dela in znanja; uporabo pedagoško vsebinskih znanj pri pouku, uporabo in preverjanje teoretičnih spoznanj v neposredni pedagoški praksi; pridobivanje pedagoških izkušenj in razvijanje kompetenc učitelja matematike; obvladovanje izobraževalne tehnologije.

Objectives and competences:

To train students for: planning, implementation and analysis of teaching; assesment of school work and knowledge; use of pedagogical content knowledge in instructions; use and verification of theoretical knowledge in the direct teaching practice; the acquisition of teaching experience in development of competences of mathematics teacher; proficiency in use of instructional technologies.

Predvideni študijski rezultati:

Znanje in razumevanje:

Po zaključku tega predmeta bo študent sposoben:

- uporaba različnih strategij, konceptov, modelov, metod in oblik vzgojno – izobraževalnega procesa pri izvajanju pouka;
- analiziranje in samo vrednotenje izvajanja in preverjanja dosežkov iz izvedene učne ure.

Prenosljive/ključne spretnosti in drugi atributi:

Intended learning outcomes:

Knowledge and Understanding:

On completion of this course the student will be able to:

- use of different strategies, concepts, models, methods and forms of the educational process;
- analyze and self evaluate the class appearances.

Transferable/Key Skills and other attributes:

| | | |
|---|--|--|
| <ul style="list-style-type: none"> - kombinirana uporaba različnih znanj pri izdelavi učne priprave za izvedbo konkretne učne ure; - kompetence učitelja matematike. | <ul style="list-style-type: none"> - combined use of different teaching skills at the preparing the implementation of instructions; - mathematics teacher competences. | |
| <p>Metode poučevanja in učenja:</p> | <p>Learning and teaching methods:</p> | |
| <ul style="list-style-type: none"> - Predavanja v obliki razgovorov in diskusij; - individualno učno delo; - izvedbe in analize učnih nastopov in pedagoške prakse – oblika individualnega dela. <p>Poučevanje in učenje potekata z didaktično uporabo informacijsko-komunikacijske tehnologije.</p> | <ul style="list-style-type: none"> - Lectures in the form of conversations and discussions; - individual educational work; - implementation and analysis of teaching instructions and teaching practice - a form of individual work. <p>Teaching and learning are done through the didactic use of ICT.</p> | |
| <p>Načini ocenjevanja:</p> | <p>Assessment:</p> | |
| <p>Praktični del:</p> <ul style="list-style-type: none"> - nastopi v razredu med letom, - pedagoška praksa, - hospitacije. <p>Predmet je ocenjen s končno opisno oceno »je opravil«, če je kandidat uspešno opravil vsako od naštetih obveznosti.</p> | <p>Delež (v %) / Weight (in %)</p> <p>opravil/passed opravil/passed opravil/passed</p> | <p>Practical part:</p> <ul style="list-style-type: none"> - pedagogical class appearances in the school, - pedagogical practice, - observations. <p>The course is assessed with the final descriptive grade "passed" if the candidate has successfully completed each of the above obligations.</p> |

Reference nosilca / Lecturer's references:

GAJSER, David. On convergence of binomial means, and an application to finite Markov chains. *Ars mathematica contemporanea*, ISSN 1855-3966. [Tiskana izd.], 2016, vol. 10, no. 2, str. 393-410.

CABELLO, Sergio, GAJSER, David. Simple PTAS's for families of graphs excluding a minor. *Discrete applied mathematics*, ISSN 0166-218X. [Print ed.], 2015, vol. 189, str. 41-48.

GAJSER, David. MaRS, Matematični tabor za tekmovalce in netekmovalce. V: RAZPET, Nada (ur.). *Sedemdeset let DMFA Slovenije*. Ljubljana: DMFA - založništvo. 2019, str. 77-78.