

## UČNI NAČRT PREDMETA / COURSE SYLLABUS

**Predmet:** PRAKSA POUKA  
**Course Title:** TEACHING PRACTICE

Študijski program in stopnja Study Programme and Level	Študijska smer Study Field	Letnik Academic Year	Semester Semester
MAG Kemijsko izobraževanje, 2. stopnja	/	2.	3.
USP Chemical Education, 2 <sup>nd</sup> Cycle	/	2 <sup>nd</sup>	3 <sup>rd</sup>

**Vrsta predmeta / Course Type:**

obvezni / Mandatory

**Univerzitetna koda predmeta / University Course Code:**

IZO227

Predavanja Lectures	Seminar Seminar	Vaje Tutorial	Klinične vaje Work	Druge oblike študija	Samost. delo Individual Work	ECTS
15	/	/	/	135	150	10

**Nosilec predmeta /  
Lecturer:**

doc. dr. Barbara Modec /  
Dr. Barbara Modec, Assistant Professor

**Jeziki / Languages:**

**Predavanja / Lectures:** slovenski / Slovenian

**Vaje / Tutorial:** /

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

Študent oz. kandidat mora imeti predmet opredeljen kot študijsko obveznost.

**Prerequisites:**

The course has to be assigned to the student.

**Vsebina:**

1. Seznanitev z učnim načrtom za kemijo v srednjih šolah in gimnazijah.
2. Tritedenska pedagoška praksa na gimnaziji ali ustrezni srednji šoli.
3. Vodenje dnevnika prakse.
4. Samostojna priprava in izvedba dveh učnih ur. Kritična evalvacija izvedenih učnih ur.
5. Spoznavanje dela z nadarjenimi dijaki, spoznavanje dela z dijaki s posebnimi potrebami.
6. Priprava na naravoslovni dan v šoli.
7. Spoznavanje šolskih dokumentov. Spoznavanje ostalih oblik dela učitelja na šoli.

**Content (Syllabus outline):**

1. Knowledge of Chemistry Curriculum for Secondary Education.
2. A three-week attendance of lessons in high school.
3. Portfolio of the teaching practice.
4. Independent preparation of teaching materials and execution of two teaching units. Critical evaluation of the performed teaching unit.
5. Learning how to work with talented pupils. Learning how to work with handicapped pupils.
6. Preparation of activities for "Science day".
7. Getting acquainted with the school documents. Getting acquainted with other

forms of work, apart from teaching, that the teacher has to carry out.

### Temeljna literatura in viri / Readings:

1. Učni načrti za srednje šole: <http://www.mszs.si/slo/solstvo/ss/programi.asp>
2. Zavod RS za šolstvo: <http://www.zrss.si/>
3. Del aktivnosti predmeta je tudi iskanje primernih virov za predstavitev določenih vsebin pri učnih urah. Med priporočene tuje vire sodi revija *Journal of Chemical Education*. Part of activities is also to find appropriate literature for the presentation of a certain topic dealing with chemistry. Highly recommended source is *The Journal of Chemical Education*.

### Cilji in kompetence:

Sposobnost razumljive predstavitve kemijskih vsebin dijakom, tako v ustni kot v pisni obliki. Sposobnost uporabe IKT pri pripravi in izvedbi predstavitev.

### Objectives and Competences:

The ability to present in a clear and simple manner specific topics in chemistry to high-school students, both in a written and in an oral form. The ability to use effectively the ICT (information communication technology) for such presentation.

### Predvideni študijski rezultati:

Znanje in razumevanje  
Poznavanje in razumevanje poučevanja kemije in širše znanosti.

Uporaba  
Uporaba praktičnih izkušenj pri oblikovanju učiteljskih nazorov. Sposobnost samostojne priprave študijskih materialov.

Refleksija  
Kritična ocena vsake od obeh izvedenih učnih ur v razredu.

Prenosljive spretnosti  
Sposobnost komuniciranja kemijskih vsebin srednješolski populaciji. Sposobnost vodenja razreda in delitve nalog. Sposobnost motiviranja dijakov in dajanja spodbude.

### Intended Learning Outcomes:

Knowledge and Comprehension  
Knowledge and understanding of practical teaching of chemistry and science in general.

Application  
Practical experience is necessary for student to develop his/her own teaching methods; the ability to independently prepare teaching materials.

Analysis  
Critical assessment of each lesson.

Skill-transference Ability  
Ability to carry out lectures/lessons in public/classroom; ability to run and organize tasks; ability to motivate pupils and being supportive of their ideas.

### Metode poučevanja in učenja:

Hospitacije, samostojni nastopi, razprave in konzultacije z učiteljem v srednji šoli in z učiteljem na fakulteti.

### Learning and Teaching Methods:

Preparation of lessons in accordance with the high-school syllabus of chemistry; teaching lessons; individual advanced work with a more interested population of pupils.

### Načini ocenjevanja:

Študent odda dnevnik in sumarno poročilo o praksi. Potrdilo o opravljeni praksi z oceno mentorja v šoli in

Delež (v %) /

Weight (in %) **Assessment:**

A student submits a journal and a report on the practice. A student has to submit a certificate of complete practice from a

fakultetnega mentorja je osnova za oblikovanje ocene.  Ocenjevalna lestvica: Opravljeno - neopravljeno		mentor in the school and in the faculty.  Grading: Pass – not pass
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**Reference nosilca / Lecturer's references:**

- **B. Modec**, N. Lah. Vaje iz spektroskopije. 1. izdaja, Fakulteta za kemijo in kemijsko tehnologijo, Ljubljana, 2013.
- **B. Modec**. Zbirka poskusov iz anorganske kemije za študente pedagoške fakultete. Založba FKKT, Ljubljana 2012.
- **B. Modec**, J. Brenčič, D. Dolenc, J. Koller. Structures of polymorphic forms of *trans*-(PyH)[MoCl<sub>4</sub>(Py)<sub>2</sub>]: conformational isomerism of the *trans*-[MoCl<sub>4</sub>(Py)<sub>2</sub>]<sup>-</sup> ion. *J. Mol. Struct.* 1042 (2013) 112–117.
- **B. Modec**, M. Šala, R. Clerac. Pyrazine-assisted dimerization of molybdenum(V): synthesis and structural characterization of novel dinuclear and tetranuclear complexes. *Eur. J. Inorg. Chem.* (2010) 542–553.
- **B. Modec**, J. Brenčič, J. Zubieta. A templated synthesis of tetranuclear polyoxoalkoxymolybdates(V). Bromo coordinated oxomolybdenum(V) clusters: known core structure with new ligands oxidation to the Lindquist anion. *J. Chem. Soc., Dalton Trans.* (2002) 1500–1507.