



**OPIS PREDMETA / SUBJECT SPECIFICATION**

<b>Predmet:</b> <b>Subject Title:</b>	Strokovni ogledi z varstvom okolja Technical Visits supported by environmental protection
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Študijski program Study programme	Študijska smer Study field	Letnik Year	Semester Semester
Izobraževalna kemija Educational Chemistry		2.	Zimski/Winter

Univerzitetna koda predmeta / University subject code:

Predavanja Lectures	Seminar Seminar	Sem. vaje Tutorial	Lab. Vaje Lab. Work	Teren. vaje Field work	Samost. delo Individ. work	ECTS
30	10	45			95	6

Nosilec predmeta / Lecturer:

Jeziki / Languages: Predavanja / Lecture:   
Vaje / Tutorial:

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

Prerequisites:

**Vsebina:**

**Contents (Syllabus outline):**

- tehnološko in didaktično planiranje in priprava strokovnih ogledov kemijske, biokemijske in sorodnih industrij;
- tehnološki vidiki načrtovanja in priprave strokovnih ogledov;
- didaktična priprava;
- naravovarstveni vidiki pridobivanja in predelave proizvodnih produktov kemijsko-predelovalne industrije.

- Technological and didactic planning as well as preparation of professional visits of chemical, biochemical and related industry;
- Technological aspects of planning and preparation of professional visits;
- Didactic preparation;
- Ecological aspects of acquiring and remaking the products of chemical-remaking industry.

**Temeljni študijski viri / Textbooks:**

- G.T. Austin, Shreve's Chemical Process Industries, McGraw-Hill Book Company, New York, 1984.
- M.J. Waites, N.L. Morgan, J.S. Rockey, G. Highton, Industrial Microbiology, Blackwell Publishing, London, 2004.

**Cilji:**

**Objectives:**

- spoznati metodologijo tehnološkega in didaktičnega načrtovanja ter priprave strokovnih ogledov kemijske, biokemijske in sorodnih industrij;
- usvojiti osnove načrtovanja učiteljeve priprave na strokovne ogledde.

- To know the methodology of technological and didactic planning as well as preparation on professional visits of chemical, biochemical and related industry;
- To assimilate planning of teachers preparation of professional visits.

**Predvideni študijski rezultati:**Znanje in razumevanje študenta:

- usposobljenost za tehnološko in didaktično načrtovanje, pripravo ter izvedbo strokovnih ogledov kemijske in njej sorodnih industrij.
- obvladanje učiteljeve pisne priprave na strokovne ogleda.

Prenesljive/ključne spretnosti in drugi atributi:

- sposobnost povezovanja izbranih vidikov različnih znanj in uporabe teh povezav na aktualnih področjih gospodarskih dejavnosti.
- sposobnost komuniciranja s strokovnjaki iz drugih strokovnih in znanstvenih področij.

**Metode poučevanja in učenja:**

- seminarsko delo
- terensko delo
- samostojno delo

**Načini ocenjevanja:**

- seminarske naloge:
  - a) predstavitev
  - b) zagovor
- uspešno opravljene načrtovane ogledi

Delež (v %) /  
Weight (in %)20  
30  
50**Intended learning outcomes:**Knowledge and Understanding:

- Qualification for technological and didactic planning, preparing as well as realization of professional visits to chemical and related industries.
- To be mastered teachers written preparation of professional visits;

Transferable/Key Skills and other attributes:

- Qualification of connection of appointed aspects of different knowledge and its application in actual industrial fields.
- Qualification of communication with specialists from other fields of activity.

**Learning and teaching methods:**

- Seminar work
- Field work
- Individual work

**Assessment:**

- Seminar work:
  - a) presentation
  - b) discussion
- Planning visits performed successfully

**Materialni pogoji za izvedbo predmeta :**

- seminarska soba
- vzpostavitev mreže industrijskih objektov in raziskovalnih institucij

**Material conditions for subject realization**

- Seminar room
- Network of industrial objects and research institutions

**Obveznosti študentov:***(pisni, ustni izpit, naloge, projekti)*

- uspešno opravljene naloge
- uspešno izvedeni ogledi

**Students' commitments:***(written, oral examination, coursework, projects):*

- Successfully performed seminar tasks
- Successfully realized professional visits

**Izbrane reference nosilca za posamezno učno enoto:**

HABULIN, Maja, KNEZ, Željko. Optimization of (R,S)-1-phenylethanol kinetic resolution over *Candida antarctica* lipase B in ionic liquids. *J. mol. catal., B Enzym.* [Print ed.], June 2009, vol. 58, iss. 1/4, str. 24-28, doi: [10.1016/j.molcatb.2008.10.007](https://doi.org/10.1016/j.molcatb.2008.10.007). [COBISS.SI-ID [12966422](https://www.cobiss.si/id/12966422)]

ŠULEK, Franja, KNEZ, Željko, HABULIN, Maja. Immobilization of cholesterol oxidase to finely dispersed silica-coated maghemite nanoparticles based magnetic fluid. *Appl. surf. sci.* [Print ed.], May 2010, vol. 256, iss. 14, str. 4596-4600. [COBISS.SI-ID [14055446](https://www.cobiss.si/id/14055446)]

THOREY, Paul, KNEZ, Željko, HABULIN, Maja. Alcohol dehydrogenase in non-aqueous media using high-pressure technologies : reaction set-up and deactivation determination. *J. chem. technol. biotechnol. (1986)*. [Print ed.], 2010, vol. 85, str. 1011-1016. [COBISS.SI-ID [14291222](#)]

ŠULEK, Franja, DROFENIK, Mihael, HABULIN, Maja, KNEZ, Željko. Surface functionalization of silica-coated magnetic nanoparticles for covalent attachment of cholesterol oxidase. *J. magn. magn. mater.*. [Print ed.], Jan. 2010, vol. 322, iss. 2, str. 179-185, doi: [10.1016/j.jmmm.2009.07.075](#). [COBISS.SI-ID [13418262](#)]

PRIMOŽIČ, Mateja, KNEZ, Željko, HABULIN, Maja. Mehanizmi in kinetika encimskih reakcij z dvema substancama. *Kemija v šoli in družbi*, jun. 2010, letn. 22, št. 2, str. 20-25. [COBISS.SI-ID [14251798](#)]

KAVČIČ, Sabina, KNEZ, Željko, HABULIN, Maja. Aditivi v prehrani. *Kemija v šoli in družbi*, okt. 2010, letn. 22, št. 3, str. 10-13. [COBISS.SI-ID [14704150](#)]