

**UČNI NAČRT PREDMETA / SUBJECT SPECIFICATION**

<b>Predmet:</b>	Gospodarjenje z nevarnimi snovmi
<b>Subject Title:</b>	Management of hazardous substances

<b>Študijski program</b> <b>Study programme</b>	<b>Letnik</b> <b>Year</b>	<b>Semester</b> <b>Semester</b>
Varstvo okolja in ekotehnologije	2	2 ali 3

<b>Predavanja</b> <b>Lectures</b>	<b>Sem. vaje</b> <b>Tutorial</b>	<b>Lab. vaje</b> <b>Lab. work</b>	<b>Teren.</b> <b>vaje</b> <b>Field work</b>	<b>Samost. delo</b> <b>Individ.</b> <b>work</b>	<b>ECTS</b>
20	15	15		130	6

<b>Nosilec predmeta / Lecturer:</b>	izr. prof. dr. Viktor Grilc / Viktor Grilc Viktor, Ph.D., Associate Prof.
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<b>Jeziki / SL</b> <b>Languages:</b>	<b>Predavanja /</b> <b>Lectures:</b>	20
	<b>Vaje / Tutorial:</b>	30

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

Pogojev ni (izpolnjeni splošni pogoji za vpis na visoko šolo)

**Prerequisites:**

None.

**Vsebina:**

- Nevarne snovi (definicije, pravne podlage)
- Nevarni odpadki (kriteriji, vrste, viri)
- Ravnanje z nevarnimi odpadki (principi, namen, izvedba)
- Nevarni odpadki v Sloveniji (vrste, načini ravnanja, trendi)
- Nevarne snovi v industriji (vrste, obveznosti imetnikov)
- Kemijska varnost (podlage, aktivnosti)
- Nesreče z nevarnimi snovmi (vrste, ukrepanje)

**Content (Syllabus outline):**

- Hazardous materials (definition, legal base)
- Hazardous waste (criteria, types, sources)
- Hazardous waste management (principles, objectives, execution)
- Hazardous waste in Slovenia (types, treatment methods, trends)
- Hazardous materials in the industry (types, obligations of the owners)
- Chemical safety (base, activities)
- Hazardous materials incidents (types, measures)

**Temeljni literatura in viri / Textbooks:**

- Ullmanns Encyclopedia of Industrial Chemistry, Vol. B7/I+II, Environmental Protection and Industrial Safety, VCH; Weinheim, 1995
- Freemann H.M.; Standard handbook of hazardous waste treatment and disposal, McGraw-Hill, 1999
- Resolucija o nacionalnem programu za kemijsko varnost. Ur. list RS, št. 119/2006
- Haines, J. (Ed.) (2009). An Integrated Approach to Sound Management of Chemicals and Waste. Ministrstvo za zdravje, Urad RS za kemikalije

**Cilji:**

Seznantiti študente s problematiko gospodarjenja z nevarnimi snovmi in jih usposobiti za nadaljnje samostojno pridobivanje znanj s tega področja. Razvijati veščine pri pripravi in predstavitvi specifičnih problemov in njihovih rešitev.

**Objectives:**

To acquaint the students with the problems of hazardous materials management and to qualify them for further independent acquisition of knowledge from this field of work.  
To develop the skills for preparation and presentation of specific problems and their solutions.

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

Študent bo ob zaključku tega predmeta sposoben razumeti kompleksnost in interdisciplinarnost gospodarjenja z nevarnimi snovmi ter pridobljeno znanje uporabiti pri obravnavi konkretnih zadev.

**Prenesljive/ključne spretnosti in drugi atributi:**

Študent bo sposoben uporabe različnih informacijskih virov za pridobivanje in interpretacijo relevantnih podatkov ter njihovo pisno in ustno posredovanje v timu.

**Intended learning outcomes:****Knowledge and Understanding:**

The student will be at the completion of this course able to understand the complex and interdisciplinary character of hazardous materials management. He will be able to use the acquired knowledge in dealing with concrete subjects.

**Transferable/Key Skills and other attributes:**

The student will be able to use different information sources for acquisition and interpretation of relevant data and their oral and written presentation in the team.

**Metode poučevanja in učenja:**

Predavanja, seminarske vaje in terenske vaje.

**Learning and teaching methods:**

Lectures, tutorial and field work.

**Načini ocenjevanja:****Način (pisni izpit, ustno izpraševanje, naloge, projekt):**

Pisni ali ustni izpit  
Seminarske vaje  
Terenske vaje

Delež (v %) /  
Weight (in %)

50 %  
30 %  
20 %

**Assessment:****Type (examination, oral, coursework, project):**

Written or oral examination  
Tutorial  
Field work

**Materialni pogoji za izvedbo predmeta :**

Predavalnica z multimedijško opremo.

**Material conditions for subject realization:**

Classroom with the multimedia equipment.

**Obveznosti študentov:**

(pisni, ustni izpit, naloge, projekti)

Pisni ali ustni izpit po predhodno opravljenih seminarских vajah in oddanem poročilu o terenskih vajah.

**Student's commitments:**

(written, oral examination, coursework, projects):

Written or oral examination after previous completion of the seminar and field work report.