

**UČNI NAČRT PREDMETA / SUBJECT SPECIFICATION**

<b>Predmet:</b>	Okoljski terorizem in bioterorizem
<b>Subject Title:</b>	Environmental Terrorism and Bioterrorism

Študijski program Study programme	Letnik Year	Semester Semester
Varstvo okolja in ekotehnologije	1	1

Predavanja Lectures	Sem. vaje Tutorial	Lab. vaje Lab. work	Teren. vaje Field work	Samost. delo Individ. work	ECTS
20	15		15		4

<b>Nosilec predmeta / Lecturer:</b>	doc. dr. Martin Batič, doc. dr. Srečko Feliks Krobe / Martin Batič, Ph.D., Assist. Prof., Srečko Feliks Krobe, Ph.D., Assist. Prof.
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<b>Jeziki / SL</b>	<b>Predavanja / Lectures:</b>	20
<b>Languages:</b>	<b>Vaje / Tutorial:</b>	30

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

- osnovno znanje mikrobiologije in biologije;
- znanje s področja biotehnologije;
- znanja s področja vplivov industrije na okolje;
- znanja s področja vplivov kmetijstva na okolje.

**Prerequisites:**

- basic knowledge of microbiology and biology,
- knowledge of biotechnology;
- knowledge from the field of industrial effects on the environment;
- knowledge from the field of agricultural effects on the environment.

**Vsebina:**

- Definicije okoljskega terorizma in bioterorizma:
  - okoljski terorizem (eko-terorizem);
  - bioterorizem.
- Pregled primerov uporabe taktik skozi zgodovino:
  - radikalno okoljevarstvo;
  - bioterorizem.
- Vrste okoljskih tematik ter bio-terorističnih agensov:
  - lista okoljskih tematik;
  - razdelitev agensov (biološki, kemijski, fizikalni, ...);
  - klasifikacija (humani, animalni, rastlinski).
  - primeri ekstremnih dogodkov
- Priprava in odgovor:
  - odkrivanje, obvladovanje in nadzor;
  - diagnostika in zdravljenje;
- Odgovor na napad in grožnje okoljskega terorizma in bioterorizma

**Content (Syllabus outline):**

- Definition of environmental terrorism and bioterrorism:
  - environmental terrorism (eco-terrorism);
  - bioterrorism.
- Examples of tactics through history:
  - radical environmentalism;
  - bioterrorism.
- List of environment topics and types of agents:
  - list of environment topics;
  - types of agents (biological, chemical, physical, ...);
  - classification (human, animal, plant).
  - examples of extreme event
- Planning and response:
  - detection, control and supervision;
  - diagnostics and medical treatment;
- Response to environmental terrorism and bioterrorism incident or threat

**Temeljni literatura in viri / Textbooks:**

Elhanani, D. Environmental Protection VS. Eco & Environmental Terrorism: Threats, Impact and Contingency Plans. NATO Science for Peace and Security Series C: Environmental Security, Springer, 2009, pp. 479-489.  
 Schwartz, D.M. 1998. "Environmental Terrorism: Analyzing the Concept". Journal of Peace Research. Vol. 35, No. 4, July 1998, pp. 483-496.  
 Dando, M. Bioterror and Biowarfare: a beginner's guide. Oneworld, Oxford, 2006, p. 193.  
 Grey, M.R. and Spaeth, K.R. The Bioterrorism Sourcebook. McGraw-Hill, Toronto, 2006, p. 549.  
 Svetovna zdravstvena organizacija (WHO). Global Alert and Response (GAR)- <http://www.who.int/csr/en/>

**Cilji:**

Premet obsega sklop osnovnih znanj potrebnih za razumevanje okoljskega terorizma in bioterizma ter usposablja študente glede možnih nevarnosti povezanih z okoljem in biološko nevarnimi agensi. Študentje bodo pridobili določena znanja glede okoljskih tematik ter možnih poti izdelave nevarnih agensov kakor tudi metod za preprečevanje in zmanjševanje posledic delovanja.

**Objectives:**

Subject acquaint students with basic skills necessary for understanding of environmental terrorism and bioterrorism, and qualify students about the possible risks related to the environment and bio-hazardous agents. Students will be encourage the acquisition of knowledge on environment topics and potential pathways of manufacture of dangerous agents as well as methods for preventing and minimizing the consequences of action.

**Predvideni študijski rezultati:**

**Znanje in razumevanje:**

Študent bo ob zaključku tega predmeta imel znanje glede nevarnosti in negativnih potencialov okoljskega terorizma in bioterizma za človeka, živali in okolje. Sposoben bo prepoznavati in razlikovati ekoterizem in bioterizem ter pokazati na njune potencialne nevarnosti. Prav tako bo razvil sposobnost razumevanja dilem ter spremljanja razvoja, kakor tudi ovrednotiti pomembnost odkrivanja, obvladovanja in nadzora na tem področju. V praksi bo sposoben prepoznati (ne)skladnost med teoretičnimi načeli in prakso.

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

Pridobil in poglobil bo spretnosti uporabe domače in tuje literature in drugih virov, zbiranja in interpretiranja podatkov in jih prenašati na sorodne tehnologije. Pridobil si bo tudi spretnost identifikacije in reševanja problemov ter kritične analize, sinteze in refleksije na prebrano literaturo.

**Metode poučevanja in učenja:**

Predavanja, diskusija, seminarji

**Načini ocenjevanja:**

**Način (pisni izpit, ustno izpraševanje, naloge, projekt)**

- opravljeni seminarji;
- pisni izpit.

**Intended learning outcomes:**

**Knowledge and Understanding:**

The student will be at the completion of this course have to demonstrate knowledge concerning the risks and negative potential of environmental terrorism and bioterrorism to humans, animals and the environment. It will be able to recognize and distinguish ecoterrorism and bioterrorism, and to demonstrate their potential dangers. It will also develop the ability to understand dilemmas and the importance of monitoring developments, as well as to evaluate the importance of detection, management and control in this area. In practice, it will be able to identify (in)consistency between theoretical principles and practices.

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

Student will acquire the skills how to use of domestic and foreign literature and other sources, and gathering and interpreting information. It will also gain skill how to identify and solve problem, as well as critical analysis, synthesis and reflection on the literature read.

**Learning and teaching methods:**

Lectures, discussions, seminars

Delež (v %) /  
Weight (in %)

**Assessment:**

Type (examination, oral, coursework, project):

- completed seminars;
- written examination.

**Materialni pogoji za izvedbo predmeta :**

- predavalnica z multimedijско opremo;
- računalniška učilnica.

**Obveznosti študentov:**

(pisni, ustni izpit, naloge, projekti)

- izdelana seminarska naloga;
- udeležba na seminarskih vajah;
- prisotnost na predavanjih;
- pisni izpit.

**Material conditions for subject realization:**

- classroom with the multimedia equipment;
- computer classroom

**Student's commitments:**

(written, oral examination, coursework, projects):

- completed seminars;
- participation in tutorial;
- presence at lectures;
- written examination.

