



OPIS PREDMETA / SUBJECT SPECIFICATION

Predmet:	Izbrana poglavja iz ekotoksikologije
Subject Title:	Selected Topics in Ecotoxicology

Študijski program Study programme	Študijska smer Study field	Letnik Year	Semester Semester
Doktorski študij Ekološke znanosti / Doctoral Study Ecological Sciences		Izbirni 1 ali 2 ali 3	2 ali 3 ali 4 ali 5

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
5	5				140	5

Nosilec predmeta / Lecturer:

Maja RUPNIK

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

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

Poznavanje biokemije in organizmov na ravni univerzitetnega programa	Knowledge of biochemistry and organisms at graduate level
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Vsebina:

Obravnavana so izbrana poglavja iz naslednjih sklopov.

- Tipi onesnažil okolja (anorganski, organski, težke kovine itd.)
- Načini vnosa v ekosisteme
- Razporejanje onesnažil v ekosistemih
- Učinki onesnažil na nivoju celice, organizma, populacije in ekosistema
- Biomarkerji in biosenzorji
- Biološko testiranje v ekotoksikologiji
- Ocena tveganja

Contents (Syllabus outline):

Selected topics in the following chapters are discussed.

- Different pollutants (anorganic, organic, heavy metals etc.)
- Entry of pollutants in ecosystems
- Distribution of pollutants in ecosystems
- Effects of pollution at different levels (cell, organism, population, ecosystem)
- Biomarkers and biosensors
- Biological testing in ecotoxicology
- Risk assessment

Temeljni študijski viri / Textbooks:

- Newman, M. C., M. A. Unger, 2003: Fundamentals of Ecotoxicology. Lewis Publishers 2nd edition.
- Walker, C.H., S. P. Hopkin, R. M. Sibly, D. B. Peakall, 2001: Principles of Ecotoxicology. Taylor & Francis 2nd edition.

Cilji:

Objectives:

<p>Študent spozna:</p> <ul style="list-style-type: none"> Podrobno poznavanje načinov testiranja strupenosti Podrobno poznavanje možnih učinkov onesnaževanja na populacije in ekosisteme 	<p>Student learns:</p> <ul style="list-style-type: none"> Advanced knowledge of testing methods in ecotoxicology Advanced knowledge of possible effects of pollution on populations and ecosystems
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Predvideni študijski rezultati:

<p>Študent:</p> <ul style="list-style-type: none"> Podrobno razumevanje mehanizme v ekotoksikologiji Podrobno poznavanje načinov testiranja v ekotoksikologiji <p>Prenesljive/ključne spretnosti in drugi atributi:</p> <ul style="list-style-type: none"> Kreativno vključevanje pridobljenega znanja v razumevanje drugih ekoloških in naravovarstvenih predmetov Kreativno vključevanje pridobljenega znanja pri presozi vplivov na okolje 	<p>Intended learning outcomes:</p> <p>Student:</p> <ul style="list-style-type: none"> Advanced understanding of mechanisms in ecotoxicology Advanced knowledge of principles of testing methods in ecotoxicology <p>Transferable/Key Skills and other attributes:</p> <ul style="list-style-type: none"> Creative use of knowledge of ecotoxicology into other ecological and nature conservation subjects Creative use of knowledge of ecotoxicology in risk assessment
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Metode poučevanja in učenja:

<ul style="list-style-type: none"> Predavanja Seminar 	<ul style="list-style-type: none"> Lectures Seminar work 						
<p>Načini ocenjevanja: Delež (v %) / Weight (in %)</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="padding: 5px;">• Pisni izpit</td> <td style="padding: 5px; text-align: center;">50 %</td> <td style="padding: 5px;">• Written exam</td> </tr> <tr> <td style="padding: 5px;">• Projektno naravnana seminarska naloga</td> <td style="padding: 5px; text-align: center;">50 %</td> <td style="padding: 5px;">• Problem oriented seminar essay</td> </tr> </table> <p>Assessment:</p>		• Pisni izpit	50 %	• Written exam	• Projektno naravnana seminarska naloga	50 %	• Problem oriented seminar essay
• Pisni izpit	50 %	• Written exam					
• Projektno naravnana seminarska naloga	50 %	• Problem oriented seminar essay					

Materialni pogoji za izvedbo predmeta :

<ul style="list-style-type: none"> Multimedija predavalnica 	<ul style="list-style-type: none"> Lecture hall for multimedia presentations
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Obveznosti študentov:

<p>(pisni, ustni izpit, naloge, projekti)</p> <ul style="list-style-type: none"> Pisni izpit Projektno naravnana seminarska naloga 	<p>(written, oral examination, coursework, projects):</p> <ul style="list-style-type: none"> Written exam Problem oriented seminar essay
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