Univerza v Mariboru
University of Maribor

Fakulteta za naravoslovje in matematiko / Faculty of Natural Sciences and Mathematics

OPIS PREDMETA / SUBJECT SPECIFICATION	
Predmet:	**Izbrana poglavja iz ex situ varovanja rastlin**
Subject Title:	**Selected Topics in ex situ Conservation of Plants**

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: Jože BAVCON

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

Pogoji za vključitev v delo oz. za opravljanje študijskih obveznosti:	**Prerequisites:**
Poznavanje rastlin na ravni univerzitetnega programa	Knowledge of plants at graduate level

Vsebina:	**Contents (Syllabus outline):**
Obravnavana so izbrana poglavja iz naslednjih sklopov. Rastline prispevajo zelo pomemben delež k biodiverziteti, vendar so mnoge med njimi podvržene izginjanju. Ex situ varstvo rastlinskih vrst omogoča vzgajanje ogroženih vrst na nadomestnih rastiščih. Ex situ zbirke so eden najvažnejših virov rastlinskega materiala za restavracijo degradiranih habitatov. Proučevanje rastlin in njihovih populacij na nadomestnih rastiščih omogoča ugotavljanje pogojev za uspešno reintrudukcijo. Po ocenah je danes le okrog 20 % ogroženih rastlinskih vrst v ex situ zbirkah. Cilj je, da bi se delež do leta 2010 povečal na 60 %. Študentje se podrobno seznanijo z zgodovino varovanja rastlinskih vrst v svetu in pri nas. Podrobno se seznanijo s konvencijami in direktivami, ki se nanašajo na ex situ varovanje. Podrobno se seznanijo se z metodami varovanja vrst. Podrobno spoznajo nekaj pozitivnih primerov varovanja v svetu in pri nas. Podrobno se seznanijo s smernicami in ustanovami, ki so za varstvo biotske diverzitete. V praktičnem delu podrobno spoznajo konkretne probleme varovanja vrst na nadomestnih rastiščih.	Selected topics in the following chapters are discussed. Plants share a very important part of the biodiversity, while a large amount of them are on the way of extinction. Ex situ conservation enables to grow plants in ex situ habitats. Ex situ collections are one of the most important pool of plant material for restoration of damaged and degraded habitats. Study of plants and their populations in replacement habitats enables to establish terms for a successful reintrodution. Recently, about 20% of threatened plant species are estimated to be found in ex situ collections. Until 2010, the aim of botanists is to increase this ratio to 60%. Students learn in detail about history of plant species conservation in the world and in our country. They learn in detail conventions and directives concerning ex situ conservation. They learn in detail methods of species conservation. They learn in detail about some successful cases of ex situ conservation in the world and in our country. They understand in detail the aims, and get acquainted of institutions competent in biota conservation. In practice, students get acquainted in detail of selected conservational problems in ex situ habitats.

Temeljni študijski viri / Textbooks:

- Heywood, V., 1995: Global Biodiversity Assessment, Cambridge: UNEP, Cambridge University Press.
- Jackson, W. P. S., L. A. Sutherland, 2000: International Agenda for Botanic Gardens in Conservation. BGCI, UK.
- Meffe, G. K., C. RONALD, 1994: Principles of Conservation Biology. Sinauer Ass. Sunderland.
- Ministrstvo za okolje in prostor RS, 2002: Strategija ohranjanja biotske raznovrstnosti v Sloveniji.
- Primack, R. B., 1993. Essentials of Conservation Biology. Sinauer, Sunderland, MA.
- Wraber, T., P. Skoberne, 1989: Rdeči seznam ogroženih praprotnic in semenk SR Slovenije. Varstvo narave 14-15. Ljubljana.
- Young J. A., C.G. Young, 1986: Seeds of Wildland Plants. Timber Press Portland Oregon.

Cilji:

Študenti:

- Podrobno razumejo metode in načina ohranjanja rastlinskih vrst
- Podrobno spoznajo se s problematiko ogroženih vrst
- Podrobno spoznajo različne pristope ex situ ohranjanja vrst v svetu
- Podrobno spoznajo pomen ustanov za ex situ varstvo rastlinskih vrst in njihove pristope k problematiki

Objectives:

Students:

- Advanced understanding of methods and different ways of conserving plants.
- Get acquainted in detail of problems concerning threatened plants
- Get acquainted in detail of different ways of ex situ species conservation in the World
- Get acquainted in detail of institutions dealing with the ex situ conservation, and their ways of solving problems

Predvideni študijski rezultati:

- Razlikujejo stanje ogroženosti vrst od neogroženosti
- Zanjo podrobno predvideti ustrezen način ohranjanja vrste
- Znajo podrobno predvideti posege in njih trajanje za ex situ varstvo
- Znajo podrobno izbirati najustreznejše metode dela

Prenesljive/ključne spretnosti in drugi atributi:

- Zanjo podrobno uporabiti ustrezne metode za ex situ varovanje

Intended learning outcomes:

- They distinguish threatened species from the not threathened ones
- They can forecast in detail an appropriate way of species conservation
- They can forecast in detail ways of ex situ conservation, and estimate their duration
- They can select most suitable methods

Transferable/Key Skills and other attributes:

- They can use in detail suitable methods for ex situ conservation

Metode poučevanja in učenja:

- Predavanja
- Laboratorijske vaje
- Seminar

Learning and teaching methods:

- Lectures
- Laboratory exercises
- Seminar

Načini ocenjevanja:	Delež (v %) / Weight (in %)	**Assessment:**
• Praktični kolokvij	30 %	• Practical partial exam
• Seminarska naloga	30 %	• Seminar essay
• Pisni izpit	40 %	• Written examination

Materialni pogoji za izvedbo predmeta :

Material conditions for subject realization

• *Multimedijska predavalnica* • *Botanični vrtovi*	• *Lecture hall for multimedia presentation* • *Botanical gardens*

Obveznosti študentov:	***Students' commitments:***
(pisni, ustni izpit, naloge, projekti)	*(written, oral examination, coursework, projects):*
• Praktični kolokvij • Seminarska naloga • Pisni izpit	• Practical partial exam • Seminar essay • Written examination