

Study Programme : PhD in Ecology			
Degree level: PhD			
Course Title: Ecology of invasive plants			
Nastavnik: Dr Snežana Radulović, associate professor			
Status: Elective Course			
Number of ECTS: 15			
Prerequisites:			
Course Objective: The aim of this course is to provide the basic guidelines for the prevention of biodiversity loss as a result of biological invasion. Invasive species as a threat to environment, nature conservation, economy and human health worldwide			
Course Outcome: Students should gain broad understanding of the ecology of plant invasions, prediction, mechanism of propagule pressure (introduction efforts) and the characters of successful invaders.			
Course Content: Invasive alien species as one of the most important threats to global biodiversity. A neutral terminology of invasive species. Flexibility in invasion terminology IUCN guidelines for the prevention of biodiversity loss due to biological invasion. Invading plants: their potential contribution to population biology. European map and database of alien plant invasions based on the quantitative assessment across habitats. Predicting invasions. Allelopathic potential of invasiveness. Juglone Index.			
Reading List:			
<ol style="list-style-type: none"> 1. IUCN (World Conservation Union) (1999) IUCN guidelines for the prevention of biodiversity loss due to biological invasion. <i>Species</i> 31–32, 28–42 2. Mack, R.N. (1995) Invading plants: their potential contribution to population biology. <i>Studies in plant demography</i>, (ed. J. White), pp. 127–142. Academic Press, London, UK. 3. Cleland EE, Smith MD, Anelman SJ, Bowles C, Carney KM, Horner-Devine MC, Drake JM, Emery SM, Gramling JM, Vandermast DB. 2004. Invasion in space and time: non-native species richness and relative abundance respond to interannual variation in productivity and diversity, <i>Ecology Letters</i> 7: 947–957 4. Chytry, M., Jarosík, V., Pysek, P., Hájek, O., Knollová, O., Tichy, L. & Danihelka, J. (2008) Separating habitat invasibility by alien plants from the actual level of invasion. <i>Ecology</i>, 89, 1541–1553. 5. Pysek, P., Jarosík, V. & Kucera, T. (2002) Patterns of invasion in temperate nature reserves. <i>Biological Conservation</i>, 104, 13–24 6. Chytry M, Pysek P, Wild J, Pino J, Maskell LC, Vilà M. 2009. European map of alien plant invasions based on the quantitative assessment across habitats. <i>Diversity and Distributions</i> 15: 98–107 			
Total hours:			
Lectures: 2	Practicals: 2	Other:	Student research work: 5
Methods of instruction: Independent work on solving multilevel tasks.			
Assessment (maximum number of points 100)			
Requirements	Points	Final exam	Points
Active participation in lectures	0	Written exam	80
Active participation in practicals	0	Oral exam	0
Test(s) or	0		
Report	20		