

1. COURSE SYLLABUS OF Ecosystem Restoration

Accad. year 2011/12,

2. PROFESSOR	Stefan Zerbe	3. ECTS CREDITS	5
OFFICE	Building K, Room 2.02	SCIENTIFIC FIELD	Biology
E-MAIL ADDRESS	Stefan.zerbe@unibz.it	OFFICE PHONE	0471-017 150
WEB PAGE	http://www.unibz.it/en/organisation/staffdetails.html?personid=708&hstf=708		
COURSE PAGE	http://www.unibz.it/en/sciencetechnology/progs/bachelor/agriculturalscience/courses/default.html		
4. COURSE HOURS	LECTURES	35	
	EXERCISES AND LABS	15	
	OTHER		
5. STUDY PROGRAMME	BSc Agriculture Science	6. MAJOR IN	Ecosystem management
7. YEAR	1 st -2 nd -3 rd	SEMESTER	Summer School
8. PROGRAMME STATUS	optional	9. COURSE LANGUAGE	English
10. DESCRIPTION	<p>The restoration of ecosystems has become a challenge of the 21st century throughout the world. This interdisciplinary course addresses basic and applied aspects of restoration ecology and ecosystem restoration. Additionally, general nature conservation topics, such as the sustainable use of natural resources, ecosystem structure and function, interaction between land use and landscape, and ecosystem assessment will be outlined. General concepts of restoration ecology as well as the motivation and objectives of ecosystem restoration will be communicated by specific ecosystem examples, such as forests, mires, rivers, alpine grassland, and urban-industrial sites. As ecosystem restoration is a transdisciplinary task, we also integrate economic aspects and environmental ethics. Within a seminar part of the course, the students will present specific ecosystem restoration projects.</p> <p>The course will take place in Stettin/Poland from July 14th until July 24th, 2011.</p>		
11. TEACHING FORMAT and ORGANIZATION	<p>This is a lecture-seminar-excursion course in which topics are presented by the Professor. Generally, Power Point presentations will be available in the course reserve collection database of the Faculty after each single lecture. Additional material will be provided by the teachers.</p>		

12. LEARNING OUTCOMES	<p>The course will acquaint the students with environmental problems and the importance of ecosystem restoration and sustainable land use, will provide students with information, in particular on the restoration and management of ecosystems focussing on basic as well as practical aspects of ecosystem restoration, and will promote transdisciplinary thinking within sustainable land-use development.</p>
13. TOPICS	<ol style="list-style-type: none"> 1. History of ecosystem restoration and restoration ecology 2. Concepts of restoration ecology 3. Economic aspects of ecosystem restoration 4. Aspects of environmental ethics of ecosystem restoration 5. Restoration of specific land-use types, such as forests, mires, grassland, rivers and their floodplains, alpine ecosystems, urban-industrial sites, and heaths 6. Assessment tools in ecosystem restoration and nature conservation 7. Monitoring of restoration projects 8. Stakeholders in ecosystem restoration
14. BASIC BIBLIOGRAPHY	<p>Lecture notes and selected chapters from: IUCN (2000) http://www.iucn.org Primack, RB (2006) Essentials of conservation biology, 4th ed. SER (Society for Ecological Restoration International Science & Policy Working Group) (2004) The SER international primer on ecological restoration. Version 2: Oct., 2004. http://www.ser.org Van Andel J, Aronson J (eds., 2006) Restoration ecology. The new frontier. Blackwell Publ., Oxford Zerbe, S, Wiegleb, G (eds., 2009) Renaturierung von Ökosystemen in Mitteleuropa. Springer, Spektrum Akad. Verlag.</p>
15. ELIGIBILITY	<p>none</p>
16. RECOMMENDATIONS	<p>None specific</p>
17. STUDENT ASSESSMENT	<p>Coursework will be weighted as follows: final written exam (60 %) and student seminar with oral presentation (40 %)</p>