Syllabus
Course description

<table>
<thead>
<tr>
<th>Course title</th>
<th>Landscape Ecology</th>
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<tbody>
<tr>
<td>Course code</td>
<td>47000</td>
</tr>
<tr>
<td>Scientific sector</td>
<td>BIO/03</td>
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<tr>
<td>Degree</td>
<td>Environmental Management of Mountain Areas</td>
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<tr>
<td>Semester</td>
<td>1</td>
</tr>
<tr>
<td>Year</td>
<td>/</td>
</tr>
<tr>
<td>Academic year</td>
<td>2017-2018</td>
</tr>
<tr>
<td>Credits</td>
<td>6</td>
</tr>
<tr>
<td>Modular</td>
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</tr>
<tr>
<td>Total lecturing hours</td>
<td>40 (20 + 20)</td>
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<tr>
<td>Total lab hours</td>
<td>-</td>
</tr>
<tr>
<td>Total exercise hours</td>
<td>20 (10 + 10)</td>
</tr>
<tr>
<td>Attendance</td>
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<td>Prerequisites</td>
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<td>Course page</td>
<td><a href="https://next.unibz.it/en/faculties/sciencetechnology/master-environmental-management-mountain-areas/course-offering/">Link</a></td>
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**Specific educational objectives**
The course provides basic and applied aspects of Landscape Ecology with regard to vegetation ecology, biology, and geography. The course is obligatory within the master program EMMA. Additionally to the basic aspects of Landscape Ecology, the course provides professional skills for environmental management with examples from mountain areas all over the world.

**Lecturer**
Dr. Uta Schirpke & Prof. Dr. Stefan Zerbe

**Scientific sector of the lecturer**
BIO/03

**Teaching language**
English

**Office hours**
18 (9 + 9)

**Teaching assistant (if any)**
-

**Office hours (if any)**
-

**List of topics covered**
The course will cover the following topics:
1. Introduction to Landscape Ecology
2. Landscape History in Central Europe & the Alps
3. Patterns and processes in landscapes
4. Methodologies in landscape ecological research
5. Ecosystems and land-use types in mountain areas
6. Vegetation in landscapes & plant sociology
7. Ecosystem services
8. Urban landscapes
9. Interdisciplinary aspects in Landscape Ecology
10. Applied Landscape Ecology: Nature conservation,
11. Landscape dynamics and climate change in the Alps

Teaching format
Within the lectures, the topics are presented by the professors, in close interaction with the students. Students’ contributions to discussion are highly appreciated. Generally, Power Point presentations will be available in the course reserve collection database of the faculty after the thematic lectures. Additional material will eventually be provided by the professors.

Learning outcomes
Knowledge and understanding of basic and applied aspects and methodologies in Landscape Ecology; knowledge and understanding of landscape patterns and processes as well as human impact on mountain ecosystems and landscapes

Applying knowledge and understanding to landscape and ecosystem management, solving environmental problems, or within research projects

Making judgements on landscape changes, human impact, and management options

Communication skills to present basic and applied aspects of landscape ecology and management to stakeholders, scientists, and the public clearly and unambiguously

Learning skills allow the students to continue their studies in a manner that may be largely self-directed or autonomous within practical projects or a PhD program

Assessment
Final written exam (100 %)

Assessment language
English

Evaluation criteria and criteria for awarding marks
The assessment of the written exam focuses on clarity of answers, mastery of language (with respect to teaching language), ability to summarize, evaluate, and establish relationships between topics

Required readings

Supplementary readings
Papers provided during the lecture and seminar