Syllabus

Course description

<table>
<thead>
<tr>
<th>Course title</th>
<th>Management of mountain forests</th>
</tr>
</thead>
<tbody>
<tr>
<td>Course code</td>
<td>47004</td>
</tr>
<tr>
<td>Scientific sector</td>
<td>AGR 05</td>
</tr>
<tr>
<td>Degree</td>
<td>Environmental Management of Mountain Areas (EMMA)</td>
</tr>
<tr>
<td>Semester</td>
<td>II</td>
</tr>
<tr>
<td>Year</td>
<td>I</td>
</tr>
<tr>
<td>Academic year</td>
<td>2016/17</td>
</tr>
<tr>
<td>Credits</td>
<td>6</td>
</tr>
<tr>
<td>Modular</td>
<td>no</td>
</tr>
</tbody>
</table>

Total lecturing hours: 36
Total lab hours: 
Total exercise hours: 24
Attendance: Not required by highly suggested
Prerequisites: -
Course page: -

Specific educational objectives
The course belongs to the class "characterizing" and specifically to the scientific area disciplinary area of forestry and environmental disciplines. It is aimed to provide knowledge and the scientific basis for the understanding of the ecological functioning and services of mountain forest ecosystems. The ecological functioning of forests will be considered as the fundamental base to drive mountain forest management. Management will be discussed under a multi-objective perspective. Special emphasis will be devoted to the protection forestry of mountain forests.

Lecturer
Giustino Tonon, K Building, Room 202, email: giustino.tonon@unibz.it, tel. 0471-017190.

Scientific sector of the lecturer
AGR 05

Teaching language
English

Office hours
At any time for an appointment with the lecturer

Teaching assistant (if any)
Francesco Giammarchi

Office hours
At any time for an appointment

List of topics covered
The course will cover the following topics:
1. Elements of forest ecology
2. Disturbance ecology
3. Measuring and modeling forest
4. Forest inventory
5. Dendrology
6. Managing of mountain forest ecosystems
    Forest planning and management
### Teaching format

This is a lecture and field course in which topics are presented by the Professor. Practical parts and excursions are explained by the Professor with the support of local forest managers. Power Point presentations will be available in the course reserve collection database of the faculty.

### Learning outcomes

#### Knowledge and understanding

The course is aimed to provide knowledge and the scientific basis for the understanding of the ecological functioning and services of mountain forest ecosystems. The ecological functioning of forests will be considered as the fundamental base to drive mountain forest management. Management will be discussed under a multi-objective perspective. Special emphasis will be devoted to the protection forestry of mountain forests.

**Applying knowledge and understanding**

By the end of the course, students should be able to:

1. Identify mountain forest types and ecosystems, also in the historical perspective;
2. Describe and forecast forest functioning and dynamics in relation to the main natural and human-induced disturbances;
3. Prepare a multi-objective plan of forest management;
4. Integrate the concept of ecosystem services into forest management.
5. Manage forests according to protection objectives in mountain areas

#### Making judgments

Students will have the ability to integrate knowledge formulate judgments and handle complexity of forest ecosystems and their social services.

#### Communication skills

To present the acquired skills with a correct technical language

#### Learning skills

Students will be able to autonomously extend the knowledge acquired during the study course by reading and understanding scientific and technical documentation

### Assessment

Oral exam that includes questions to assess the knowledge and understanding of the course topics and questions designed to assess the ability to transfer these skills to study cases. Space will also be dedicated to the evaluation of the ability to produce critical judgment about the topics of the course, and to the evaluation of
the communication skills.

<table>
<thead>
<tr>
<th>Assessment language</th>
<th>English</th>
</tr>
</thead>
<tbody>
<tr>
<td>Evaluation criteria and criteria for awarding marks</td>
<td>Clarity of answers, mastery of language (also with respect to teaching language), ability to summarize, evaluate, and establish relationships between topics.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Required readings</th>
<th>There is no single textbook that covers the entire course. The course material is made up by the lectures notes and papers or chapters that will be advised during the course</th>
</tr>
</thead>
<tbody>
<tr>
<td>Supplementary readings</td>
<td></td>
</tr>
</tbody>
</table>