<table>
<thead>
<tr>
<th>Course name</th>
<th>Natural Disturbances in Forest Communities</th>
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<tr>
<td>Course code</td>
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<tr>
<td>Department</td>
<td>Department of Forest Biodiversity</td>
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<tr>
<td>Faculty</td>
<td>Faculty of Forestry</td>
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<tr>
<td>Course supervisor/Lecturer</td>
<td>Professor Jerzy Szwagrzyk, Ph.D.</td>
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<tr>
<td>General information</td>
<td>Semester</td>
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<td>ECTS credits</td>
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<td></td>
<td>Lectures total</td>
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<td>Classes/labs/field classes</td>
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<td>Objective and general description</td>
<td>Student at the end of the course should know and understand the role played by natural disturbances: wildfires, winds, floods and landslides in forest dynamics. These issues are very frequently addressed in contemporary scientific papers, but are almost absent in the textbooks. The results of recent researches have shown, that natural disturbance splay key role in dynamics of various forest communities. The existence of some forest types, as well as occurrence of some plant and animal species depends on natural disturbances. The course includes: short characteristics of various kinds of natural disturbances, description of the role played by disturbances in various forest communities with a special emphasis on the forests of temperate zone, determination of the consequences of natural disturbances for the species composition and structure of forest communities, presentation of the consequences of natural disturbances for the forest management and for nature conservation.</td>
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<tr>
<td>Lectures</td>
<td>Types of natural disturbances if forest communities. Intensity, extent and frequency of natural disturbances. The role of wind in forest ecosystems. Tree architecture and their resistance to hurricanes. The ability of various species to vegetative re-sprouting after serious wind damage. The role of wildfires in forest ecosystems. Mechanisms of ignition. The consequences of wildfires for forest communities. Organisms dependent on the occurrence of fire. Role of floods. Mechanical damage to trees by the flowing water and by the floating ice. Functioning of the riparian forest communities.</td>
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The role of avalanches and landslides in the dynamics of forest communities in the mountains. Rare and less known types of disturbances: ice storms, snowfalls during the growing season.

Insect outbreaks and large-scale infestations by fungal pathogens as natural disturbances in forest communities.

Natural disturbances and the species diversity in forest communities: does the occurrence of natural disturbances increase the species diversity in forests?

Natural disturbances and the climax stage in forest communities; can the classical succession theory be defended?

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<tr>
<th>Assessment method Specify: oral/written examination</th>
<th>Written exam (test)</th>
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<tr>
<td><strong>References</strong></td>
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