

Interdisciplinary lecture – Winter 2022

Selected issues of Man-Environment relations

The course organized by the Institute of Geography and Spatial Organisation, Polish Academy of Sciences

Abstract: The last 100, 150 years have been a period of accelerating transformation of our planet's surface. Particularly significant changes have occurred in the last 50 years. They mainly concern land cover, including massive deforestation on a global scale, urban sprawl, overexploitation of resources, including fresh water, changes in the distribution of many plant and animal species, including, among others, the appearance of invasive species on the one hand, and the extinction of many species with limited geographic ranges on the other. In recent years, these phenomena, and the links between them and feedbacks from human activities, have become increasingly well understood. During the course, we will discuss the above issues, both in relation to the global scale and, with selected examples, on a regional and local scales.

Credits: 3 ECTS

Program of the studies: "GeoPlanet" interdisciplinary subjects (item 2.2 in the program of the studies)

Form: on-line

Date & time: Tuesdays, 10:00am, first lecture: October 25th, 2022

Course syllabus:

| Lecturer | Title |
|--------------------------------|---|
| Prof. Jerzy Solon | Humankind on a Changing Earth - Introductory lecture (2 h) |
| Dr Jarosław Cebulski | Anthropogenic transformation of relief - global consequences of local changes (2 h) |
| Assoc. Prof. Łukasz Wiejaczka | Large dams and water scarcity. Will we have water wars? (4 h) |
| Dr Dariusz Brykała | Watermills, land drainage and land cover change from a European perspective (2 h) |
| Dr Izabela Zawiska | The response of freshwater ecosystems to human pressure (4 h) |
| Assoc. Prof. Michał Słowiński | Extensive wildfires shape the environment (2 h) |
| Assoc. Prof. Magdalena Kuchcik | Urban Climate - consequences for Man and Nature (4 h) |
| Prof. Jerzy Solon | Biodiversity in danger: global and regional perspectives (4 h) |
| Assoc. Prof. Michał Słowiński | Past landscapes and their relation to the present (2 h) |
| Prof. Jerzy Solon | Landscape models: connectivity, fragmentation and isolation (2 h) |
| Dr Andrzej Affek | Ecosystem Services: what do we really need from the environment (2 h) |

Evaluation of the educational outcomes: essay written at home (subject will be discussed at the first lecture)

Criteria to complete the course: at least 80% attendance, final grade depends on the essay results.