

Master Landschaftswissenschaften SoSe 2019 – WiSe 2019/20  
Zweimestriges Studienprojekt (Modul M V)

## Landscape System Analysis Northern Finland



### Content of the two-semester study project of Physical Geography

The boreal and subpolar regions of Europe are characterised by relatively cold climate, resulting in comparably slow landscape processes, lower species diversity and limited options for land use by humans. We want to study and analyse these land systems from different perspectives: physical geographical components such as permafrost landforms (e.g. palsas) and processes (e.g. solifluction and glacial), vegetation development (incl. tree line) and aquatic ecology. These components form the natural base for human land uses including forestry, reindeer husbandry, tourism, nature conservation or mining. Hence, also various human activities and the ecosystem services they harvest will be assessed.

### Learning outcomes

System-analytical assessments of different landscapes in Europe's subpolar zone with a strong focus on physical geographical field methods (differential RTK GPS, ground-penetrating radar, UAV remote sensing, terrestrial laser scanning, vegetation biomass survey, lichen dating, soil survey) and human-environmental systems analysis (e.g. land use options and conflicts, ecosystem services assessments). The field course includes partly work under rough conditions, so please be prepared and bring respective equipment. The analysis of data collected during the field course will take place in the following winter semester in the GIS laboratory at the Institute of Physical Geography and Landscape Ecology at LUH.

### Schedule of the study project

During summer semester 2019:	1 preparatory group meeting at LUH
August 17 - September 01:	Data collection during a two-week field course in Finland
Winter semester 2019/20:	Data analysis in Hannover

### Organisational matters

- Travel route (by 2 minibuses): Hannover – Travemünde (ferry) – Helsinki – Joensuu – Rovaniemi – Kilpisjärvi – Jyväskylä – Helsinki – Travemünde (ferry) – Hannover
- Accommodations: youth hostel, comfortable huts and research stations
- Number of participants LUH: max. 13 (the course is part of our ERASMUS agreement with the University of Eastern Finland, which will participate with additional 6 students + 2 teachers; therefore this module is given completely in English)
- Expected costs for students: approx. EUR 650
- Registration: please register by email to [steinhoff-knopp@phygeo.uni-hannover.de](mailto:steinhoff-knopp@phygeo.uni-hannover.de) indicating your name and semester within the MSc „Landschaftswissenschaften“.

**Expressions of interest: latest February 28, 2019**

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