

Field course in Micrometeorology and Hydrology (ATM 321)

29 August – 2 September 2022, Hyytiälä Forestry Field Station, Finland



This course is organized by the University of Helsinki and it is held at [Hyytiälä Forestry Field Station, Finland](#). The course will cover several aspects related to methods for measuring biosphere-atmosphere exchange of energy and gases (Eddy covariance and chamber method), methods for hydrological measurements in the lake, as well as techniques that are widely used in forest hydrology. During the course students will use MATLAB or Python as the main tool for data analysis, as well as the software [EddyUH](#) for processing eddy covariance data.

It is intended for master and doctoral students as well as postdoctoral researchers. The course is worth 5 credits of ECTS (European Credit Transfer System).

Topics to cover

- Eddy covariance system setup, sensors, methods, and data processing using EddyUH.
- Gas exchange measurements using chambers.
- In-water measurements of water temperature, conductivity and optical properties with multiparameter probes
- Forest hydrological measurements of plant water potential, leaf transpiration and sap flow

Course schedule and grading

The course will consist of field sessions, lectures and data analysis (group work). A visit to SMEAR II station is included in the course.

The grading of the course is based on the group presentation on the last day (Friday, 2nd of September) and the group scientific report (to be completed two weeks after the course).

Location and time

[Hyytiälä Forestry Field Station, Finland](#)

Monday, 29th August – Friday, 2nd September 2022

Teachers

Xuefei Li, Aki Vähä, Risto Taipale, Angelika Kuebert, Joonatan Ala-könni and Gonzalo de Quesada Alzamora

Participation costs

The normal course fee is 900 EUR, including transfers between Helsinki and Hyytiälä, accommodation in two-person rooms, full board (breakfast, lunch, afternoon coffee, dinner, and evening snack) during the course and social program during the course. For students from University of Helsinki, the full fee is covered by Master's Programme in Atmospheric Sciences. For students of other Finnish and Nordic Universities, the course fee is 300 EUR (to be paid on site).

Registration

Apply here: <https://elomake.helsinki.fi/lomakkeet/117571/lomake.html>. Registration is open till 17th June 2022. For students from University of Helsinki, registration on Sisu is also required.

Transportation schedule

Monday, August 29

8:00 Bus departure from Helsinki Kumpula Campus

11:30 Arrival in Hyytiälä station

Friday, September 2

12:00 Departure from Hyytiälä station

15:30 Arrival in Kumpula Campus

COVID-19

We will follow the recommendations given by the local authorities on the special arrangements required due to the COVID-19 pandemic. The students will be informed before the course about these arrangements.

Further information

Please contact: Xuefei Li (xuefei.z.li@helsinki.fi)

Welcome!