



SYSTEMSCHANGE.NOW – SPRING TERM 2022 (Jan 19th – Mar 23rd)

Climate Change calls for urgent attention to the links between humans and our natural environment.

When we understand Climate Change **as a systemic phenomenon** - the product of a certain system of connections between things, we unlock a powerful set of tools for making sense of it: **systems thinking**.

CONTENTS:

This course has three main Themes:

- 1) **“Intro to Systems Thinking”** looks at what systems are and different ways in which they can be described and modelled.
- 2) **“Earth Systems”** delves into Earth System Science and how Climate Change is affecting the Earth seen as a system of interconnected spheres.
- 3) **“Eco-Social Systems”** focuses on humans as agents of change in systems that link individuals and groups of people with the environments they inhabit and depend upon.

LEARNING GOALS

After the course students will be able to:

- ✓ justify **why systems thinking is necessary** to comprehend the implications of climate change and other global challenges, and relate them to changes in the Earth system and human eco-social systems.
- ✓ apply, criticize and defend **models to ask and test questions** about the structures and dynamics of systems.
- ✓ apply systems thinking in **interdisciplinary collaboration** and reflect on their personal role as a developing systems thinking expert.
- ✓ reflect on the opportunities for **intentional systems change** and their own agency.

STUDY METHODS:

- **Contact sessions online**, reading, online exercises, home assignments, **multidisciplinary group work**, peer evaluation, learning portfolio.

BASIC INFORMATION:

- **Scope: 5 ECTS** credits (~135 hours of work)
- **Eligibility: master-level course, open to all students** from Aalto University, Tampere University, University of Turku, University of Helsinki and via Open University
- **Teaching: weekly contact sessions** in Zoom (Wed 13-16) plus one whole-day seminar
- **Materials:** online at www.digicampus.fi
- **Grading:** 1-5
- **Prerequisites:** Climate University course **Climate.now** or **Sustainable.now** or corresponding basic knowledge on climate change and/or sustainability topics.
- **Course codes and contact persons:**

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Sanna-Liisa Sihto-Nissilä

Tampere University:

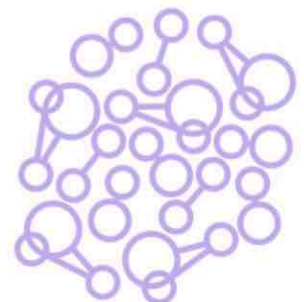
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AALTO: Register via Sisu (course code MS-E213601)