

HO Introduction to Complex System Simulation (1 credit)

1. Instructors:

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2. Number of Students Accepted: 4-6

3. Schedule: **Wednesdays, 3rd period, during the second semester**

4. First Session Date, Time, and Location: October 7, 1:00 PM

International Research Institute of Disaster Science Building Room E401

5. Overview: A complex system refers to a collection of elements that are self-organized through mutual interaction. The challenge with such systems lies in the fact that the behavior of the system as a whole cannot be predicted based on its individual components. Therefore, we describe the individual components, model their interactions, and observe the resulting behavior of the system. In this training session, we will introduce what complex systems are and how they can be simulated. We will also examine various practical applications of this modeling approach. As an example, we will create a simple computer model for disaster evacuation and learn how to use it.