PhD-course in Population modeling, 7,5 ECTS

Week 1: 16 - 20 December, 2013

Week 2: 3 - 7 February 2014

This is a course that is compulsory within the PhD program of applied ecology at Evenstad campus, HUC. The aim is to give an overview of different methods to understand, model and make projections of population dynamics.

The first week will provide you with an overview of important concepts and approaches in population modeling such as density dependence, structured populations, agent (individual) based models, PVAs, parameter estimation, state-space models. This week is structured as talks in the morning and exercise or seminars after lunch. Dr Tomas Willebrand and Dr Viktoriia Radchuk are responsible for this part.

The second week focuses on specific case studies presented by invited lecturers. They will present their research questions, how their model development has proceeded and what alternative approaches were considered. Each case will be discussed in a seminar for which the students should have prepared questions based on supplied texts. Tomas Willebrand is responsible for this part.

The examination of the course is in a form of an assignment that is given during the first week. Each student should analyze a given data set of an existing or a simulated population and write an individual report following the standard IMRD structure. We encourage students to use their own data if possible. More details will be provided during the course. Tomas Willebrand is the examinator on the assignment.

The course will be open for all students registered at the IRSAE-research school in addition to PhD-students in Applied Ecology at Evenstad. The total number of students is limited to 20.