

**Course title: Introduction to population dynamics**  
**JE 203 3 credits**

**Instructors: Prof. A. Joshi**

ca. 42 hrs lecture; pre-requisites: JE 204; 3-4 homework assignments, possibly augmented by one open book exam.

**Syllabus:**

Historical outline of the development of classical population dynamics theory.

Continuous and discrete time models of single species population growth.

Dynamic behaviour: equilibria, limit cycles and chaos.

Spatially structured population growth models.

Experimental approaches to population dynamics.

Models of species interactions.

Models of growth in age-structured populations.