



Full Syllabus



Course Title

Introduction to Ecology

Lecturer

Michal Gruntman

Semester

A

Course requirements

Attendance in 80% of the lectures

Final grade components

Final exam (100%) and weekly assignments (each assignment with a passing score gives one bonus credit point in the final grade)

Course schedule

Class no. / Date	Subject and Requirements (assignments, reading materials, tasks, etc.)
1	Introduction: the scientific method in ecology, levels of organization in ecology
2	Evolution: microevolution, natural selection, genetic drift, and gene flow
3	Evolution: macroevolution, the biological species concept and speciation
4	Population ecology: population dynamics, life-history strategies
5	Small populations: endangered species conservation and metapopulations
6	Competition: types of competition, niche partitioning and species coexistence
7	Predation and herbivory: models, coevolution and adaptations
8	Mutualism: types and specializations of mutualistic interactions
9	Community ecology: patterns of species richness and diversity across scales
10	The biodiversity crisis: anthropogenic causes and consequences of biodiversity loss
11	Ecological succession: models of succession and management implications
12	Ecosystem ecology: trophic levels, keystone species and food webs

Optional course reading

Begon M., Townsend C.R. & Harper J. 2006. Ecology: From Individuals to Ecosystems. Willey-Blackwell

Real L.A. & Brown J.H. (eds). 1991. Foundations of ecology: classic papers with commentaries. University of Chicago Press.