

Full Syllabus



Course Title

Plant Ecology

Lecturer

Michal Gruntman

Semester

R

Course requirements

Previous participation in an introductory ecology course

Final grade components

Exercises (20%) and final exam (80%)

Course schedule

Class no. / Date	Subject and Requirements (assignments, reading materials, tasks, etc.)
1	Introduction to the study of plant ecology: field observations and experimental designs.
2	Plant life history strategies: phenology, mating systems, trade-offs, allometry and bethedging.
3	Plant life history strategies: classification theories of plant strategies and environmental effects.
4	Intraspecific competition: effects on population yield, size hierarchies and size-asymmetric competition.
5	Interspecific competition: models of interspecific competition, experimental designs and competition indices and competitive effect and response.
6	Facilitation: positive plan-plant interactions and environmental effects.
7	Pollination ecology: floral traits and pollination syndromes.
8	Pollination ecology: flower constancy and deception.
9	Seed dispersal: different mechanisms and seed and fruit traits.
10	Seed dispersal: costs of dispersal, heterocarpy and community level implications.
11	Interactions with soil biota: evolution of mutualistic interactions with fungi and bacteria, environmental effects, punishment and reward and effects on plant competition.
12	Herbivory: evolution of resistance and tolerance, environmental effects, induced defenses, effects on community productivity, diversity and species composition.
13	Carnivorous plants: their evolution, costs and deception mechanisms and mutualistic interactions with other species.

Required course reading

Will be provided during the course

Optional course reading

Keddy P, Plant Ecology: Origins, Processes, Consequences (Cambridge University Press, 2017).

Crawley MJ, Plant Ecology (Oxford: Blackwell Science, 1997).



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