



Ecology

"Target of the class is to learn the principles of Ecology. Another aim is the students to come in contact to the environmental issues, either related to the agriculture, or the general ones, concerning the planet. It is crucial for the student to understand the function of agroecosystems and its reciprocal impact to the rest of the biosphere. The chapters of the class include: Ecosystem and its parts – Organisms and its chemistry – Metabolism. Solar Radiation – temperature – thermic equilibrium of organisms – thermic water pollution. Winds – Precipitations – Water flow – Populations and Bio communities. Species relations (Predation, Parasitism, Competition, Neutrality etc.). Evolution and Natural Selection. Ecological succession – Biodiversity – Terrestrial and Aquatic Ecosystems. Biomes (Tundra, Taiga, Temperate evergreen and deciduous forests, Prairies, Mediterranean biomes: Maquis and Garrigue, Rivers, Lakes, Ecosystems of the Seas and Oceans). Biogeochemical cycles (Carbon, Nitrogen, Oxygen, Phosphorus, Sulphur, Water) Water pollution – Mathematics and Models in Ecology – Human impacts on Environment. Conservation areas – Threatened, rare etc. species of plants and animals.