



Interdisciplinary field approach to teach Environmental Sciences. The biggest ecological gradient in S-Europe as scenario.

Alexander Cernusca (1), Federico Fillat (2), Daniel Gómez (2), Neil Bayfield (3), and David Badía-Villas (4)

(1) University of Innsbruck. Institute of Ecology, Sternwartestrasse 15, A-6020 Innsbruck, Austria (alexander.cernusca@uibk.ac.at), (2) Instituto Pirenaico de Ecología. Polígono del Llano de la Victoria, E-22700 Jaca, Spain (ffillat@ipe.csic.es; dgomez@ipe.csic.es), (3) University of Aberdeen, King's College, AB24 3FX, Scotland (neil.bayfield@yahoo.co.uk), (4) University of Zaragoza, High Technical School of Environmental Sciences and Agrarian Engineering, Crtra. Cuarte s/n, E-22071 Huesca, Spain (badia@unizar.es)

A multi- approximation to Natural Sciences learning is proposed taking the field as scenario, along the biggest environmental gradient in South-Europe. Different Bio- and Geo-diversity hotspots from the arid Ebro Basin to the subalpine stage of the Pyrenees Mountains are the lecture halls; there, Univ. professors, decision-makers and scientists teach on geology, soil science, botany, ecology or land-use management discuss on real conflicts. This approximation is aimed at students on Master- and PhD-level of the subjects biology, ecology, agriculture and forestry, landscape planning and environmental technology. Problem cases, workshops and "success stories" on sustainable development were studied using ICT tools in practical examples by means of study and field trips. Additionally web contents (as www.ipe.csic.es/floragon/index.html) give support to these tools. The course was held along an ecological transect with contrasted scenarios as: salt-playa lakes in the Monegros Desert, the biggest river confluence on the Iberian peninsula (Aiguabarreig), the beechwoods in the Moncayo Natural Park or the alpine grasslands of Spanish Pyrenees Mountains. These areas are natural spaces with some figure of protection, from special protection area for birds to National Parks.

The interdisciplinary and European dimension of this project is shown clearly in the orientation of the content and in the interaction between the partners from within and without universities. The curriculum of the Intensive Programme has been included as a compulsory module into the Master- and PhD-Programme "Ecology and Biodiversity".

This teaching format, below the Erasmus Intensive Programme (IP) SUSTMONT – "Training on approaches to sustainable development in mountain areas under global change" won recently the Lifelong Learning Award (2010) from the Austrian Minister for Science and Research. SUSTMONT has lead to an intensification and continuation of the IP-partnerships with the objective of a Joint Master Programme "Sustainable Mountain Management", which will be further pursued within the new Erasmus Intensive Programme EUROSTAIN.