Conservation planning and monitoring 808 (ZEN 808)

Qualification	Postgraduate
Faculty	Faculty of Natural and Agricultural Sciences
Module credits	15.00
Programmes	MSc Environmental Ecology (Coursework)
Prerequisites	No prerequisites.
Contact time	4 discussion classes per week
Language of tuition	Module is presented in English
Department	Zoology and Entomology
Period of presentation	Year

Module content

Biodiversity survey techniques; data and information management; data assessment; principles of data extrapolation; inventories; biodiversity risk assessment (PHVA, small and declining population paradigms, prioritisation); principles of reserve selection; surrogacy; reserve design; integrated land-use planning. Landscape theories and models (hierarchy, percolation, metapopulation, source-sink); scaling patterns and processes across landscapes (patches, corridors, mosaics and flows); emerging patterns and processes; principles of landscape dynamics; principles of landscape conservation, management and design (transformation, fragmentation); methods in landscape ecology (numerical and spatial data processing, fractal geometry approach, GIS, remote sensing, GPS, spatially explicit population models).
Skills: GradSect, Access, Excel, Visual Basic, GIS (Arc View) reserve selection algorithms.