



Master in Life Sciences

A cooperation between
BFH, FHNW, HES-SO, ZFH

Module	Conservation of natural- and agro-ecosystems
Code	MLS_S18
Degree Program	Master of Science in Life Sciences (MSLS)
Cluster	Environment
Specialization	Natural Resource Management
ECTS Credits	4
Workload	120 h: Contact & Field work 56 h; Self-study 64 h
Module Coordinator	<p>Name Claude Fischer</p> <p>Phone +41 22 546 68 75</p> <p>Email claude.fischer@hesge.ch</p> <p>Address HEPIA-Lullier, 150 route de Presinge, 1254 Jussy</p>
Lecturers	<ul style="list-style-type: none"> • Pascal Boivin, Claude Fischer, Patrice Prunier (HEPIA)
Entry Requirements	Bachelor in LS, Agronomy or Natural resource management, or equivalent
Learning Outcomes and Competences	<p>After completing the module students will be able to elaborate a conservation management plan which include:</p> <ul style="list-style-type: none"> • Identify stakes of ecosystem conservation and sustainable exploitation • Determine and identify factors implicated in natural- and agro-ecosystem conservation; • Define objectives of ecosystem conservation and sustainable exploitation; • Develop monitoring systems.
Module Content	<ul style="list-style-type: none"> • Reminding legal frames of conservation of natural- and agro-ecosystems (biodiversity strategy, LAT, LPE, action plan in Switzerland...) • Soil and water conservation processes (in natural and agricultural systems) • Biodiversity conservation (at different levels: landscape, plant, animal and genetic) • Evaluation tools (endangered species, invasive species, protected areas), habitats and networks • Strategy of species introduction for conservation purposes.
Teaching / Learning Methods	<ul style="list-style-type: none"> • Lectures • Individual and group exercises • Case-studies / projects • Field trips (mandatory)

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	<ul style="list-style-type: none"> • Active participation in the module is requested
Assessment of Learning Outcome	<p>Examination: Report(s) produced during the S-module, 100% of grade</p> <ul style="list-style-type: none"> • Reassessment: oral/written exam within four weeks after the publication of the grades.
Bibliography	<ul style="list-style-type: none"> • Scherr, S.J. and J.A. McNeely. 2008. Biodiversity conservation and agricultural sustainability: toward a new paradigm of 'ecoagriculture' landscapes. <i>Phil. Trans. R. Soc.</i>, 363: 477-494. • Bianco-Canqui, H. and R. Lal. 2008. Principles of soil conservation and management. Springer, Berlin, DE. 617 pp. • Groves, C.R. et al. 2003. Drafting a conservation blueprint: a practitioner's guide to planning for biodiversity. Island Press. Washington DC, USA. 400 pp. • Sutherland, W. J., and D. A. Hill. 1995. Managing Habitats for Conservation. Cambridge University Press, Cambridge, UK. 399 pp. • Sayer, J. A., and B. M. Campbell. 2004. The science of sustainable development. local livelihoods and the global environment. Cambridge University Press, Cambridge, UK. 288 pp. <p>Documentation: http://cyberlearn.hes-so.ch (requires a login)</p>
Language	English
Comments	
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