

Soil Protection and Conservation

Course description

Subject leader: Adrienn Horváth, Ph.D., assistant professor

Lecturer: Adrienn Horváth, Ph.D., assistant professor

Institute: University of Sopron, Faculty of Forestry, Institute of Environmental and Earth Sciences

Course code:

Credit points: 3

Evaluation: oral exam / written exam / mid-term grade

Instruction hours/week (lecture + practice): 1 + 1

Language: English

Course content

Complexity of soil resource sustainability. Soil functions. Effects of soil degradation. Soil tillage and quality. Fertilizers and pesticide use. Irrigation and dewatering. Erosion, deflation. Soil contamination. Heavy metals, acids, pesticides, fertilization, gases. Remediation of soil. Reduce opportunities of soil degradation.

Required and recommended reading

Alloway, B.J. (ed.) (1995): Heavy Metals in Soils. Blackie Academic and Professional, London, UK.

Blume, H.P., Horn, R., Thiele-Bruhn, S. (2010): Handbuch des Bodenschutzes. 4. Aufl., Wiley VCH, Weinheim (in German)

Bullock, P., Gregory, P.J. (eds.) (1991): Soils in the urban environment. Blackwell, Oxford

Hazelton, P., Murphy, B. (2011): Understanding soils in Urban Environments. Csiro Publishing, Collingwood

Osman, K.T. (2014): Soil Degradation, Conservation and Remediation. Springer Dordrecht Heidelberg New York London. ISBN 978-94-007-7589-3 (eBook: <http://libcatalog.cimmyt.org/download/general/99143.pdf>)

Weil, R.R., Brady, N.C. (2016): The nature and properties of soils. 15th edition. Columbus: Pearson, 2016. ISBN 978013325448.