

# Watershed Management

**Lecturer:** Prof. Dr. Zoltán Gribovszki

**Institute:** University of Sopron, Faculty of Forestry, Institute of Geomatics and Civil Engineering

**Course code:** EG518-B0000

**Credit points:** 3

**Time table:** Lecture:1/Lab:2

**Language:** English

## Course description

### Topics

Lectures: Purposes of watershed management in the forestry. Preliminary investigations, hydrological calculations. Design of reservoirs and ponds, stream and torrent regulation works. Operating, maintaining hydraulic engineering works.

Practice: Exercises from pond planning, stream and torrent regulation works. Field practice: Field excursion to forested watersheds.

### References

1. S. Lawrence Dingman: Physical Hydrology, Prentice Hall, Upper Sadle River, New Jersey, 2002.
2. Franklin W. Schwartz – Hubao Zhang, Fundamentals of Groundwater, John Wiley & Sons, Ltd., New York, 2003.
3. Hewlett John D.: Principles of Forest Hydrology. The University of Georgia Press, Athens, 1982.
4. Nancy D. Gordon – Thomas A. McMahon – Brian L. Finlayson – Christopher J. Gippel – Rory. J. Nathan, Stream Hydrology (an Introduction for Ecologist), John Wiley & Sons, Ltd., Chirchester, 2004.
5. Pond Planning, Design, Construction, USDA Agricultural handbook number 590, 1982