

Tárgytematika / Course Description

The Basics of Water Management

MENB_VKTA026

Tárgyfelelős neve /

Teacher's name: dr. Varga Zoltán

Félév / Semester: 2022/23/1

Beszámolási forma /

Assesment: Vizsga

Tárgy heti óraszám /

Teaching hours(week): 2/2/0

Tárgy féléves óraszám /

Teaching hours(sem.): 0/0/0

OKTATÁS CÉLJA / AIM OF THE COURSE

Objective of the course:

Water and water management have already become one of the biggest problems in the world of the next decades. Climate change has made this issue even more important in all sectors of the economy.

TANTÁRGY TARTALMA / DESCRIPTION

Content of the course:

Week 1: Introduction to the water management.

Week 2: Hydrology, physical, chemical and biological properties of water.

Week 3: The hydrological cycle.

Week 4: Surface waters, groundwater.

Week 5: Hydraulics, fluid movements.

Week 6: Lowland water management.

Week 7: Underground drainage pipes.

Week 8: Mountain water management.

Week 9: Agricultural water utilization.

Week 10: Irrigation methods.

Week 11: Drinking water supply.

Week 12: Flood protection.

Week 13: Waste water treatment.

Week 14: Test writing

Practical lessons focus on practical use of water management information.

SZÁMONKÉRÉSI ÉS ÉRTÉKELÉSI RENDSZERE / ASSESSMENT'S METHOD

Requirements:

Student must attend the weekly lectures as well as practical lessons. No more than 25% of the lectures and practical sessions are allowed to be missed for any reason.

Type of exam: oral examination with theoretical and practical questions.

KÖTELEZŐ IRODALOM / OBLIGATORY MATERIAL

Compulsory reading:

J. Albiac, A. Dinar /2008/: The management of water quality and irrigation technologies, Elsevier Science
ISBN: 9780080870199

M.K. Jernar /2013/: Water resources and water management, Routledge, ISBN: 9780415849395

M.N. Rao, A.K.Datta /2017/: Waste Water Treatment, Oxford IBH, ISBN: 8120417127