Co-funded by the Erasmus+ Programme of the European Union

Aristotle University of Thessaloniki (AUTh) winter school

on

Water resources management

Final schedule (version 22 November 2021)

Week 1, 10:00-12:00

Date	Course	Short description
Monday, 6/12/2021	Sustainable Water resources management and EU legislation (Prof. Kolokytha)	Principles of sustainable water resources management. The WFD, shortcomings in implementation. Major relevant EU water legislation.
Tuesday, 7/12/2021	Hydraulics of open channels, rivers and dams (Prof. Prinos)	Flow in open channels and rivers. Calculation methods. Culverts and Bridges. Dam classification. Design Discharge. Spillways. Structures for energy dissipation.
Wednesday, 8/12/2021	*«Άριστον μεν ύδωρ». Best is Water Pindar 518 – 438 BC* Valuing the water (Prof. Kolokytha)	The value, the price and the cost of water. "The Diamond-Water Paradox". Public or private? Social or economic? The changing water scene.
Thursday, 9/12/2021	Water resources management and GIS (part 1) (Dr. Skoulikaris)	Use of GIS for the management of environmental information. Open source GIS tools and on line data sources. Creation of water related maps.
Friday, 10/12/2021	Water resources management and GIS (part 2) (Dr. Skoulikaris)	Spatial analyst techniques for the management of hydro-meteorological data.

Co-funded by the Erasmus+ Programme of the European Union

Week 2, 10:00-12:00

Date	Course	Short description
Monday, 13/12/2021	Water resources management and hydrological modelling (Dr. Skoulikaris)	The use of HEC-HMS model for hydrologic simulations. Data preparation and simulations. Exercise with GIS and HEC-HMS.
Tuesday, 14/12/2021	Global water crisis. SDG6 as a driver for sustainable development. (Prof. Kolokytha)	UN Agenda23, 2015-2030 SDG6 and its role to achieve sustainable development of our planet.
Wednesday, 15/12/2021	Water resources management and climate change (Dr. Skoulikaris)	Management of water resources under climate change conditions. Climate change models and data. Statistical and dynamic downscaling of climatic data for use in regional scales. Exercise with hydrological simulation under climate change.
Thursday, 16/12/2021	Hydraulics of water supply and sewerage systems (Prof. Prinos)	Design of gravity and pumping systems. Tanks. Design of water distribution networks. Valves for flow and pressure control. Design of separate and combined sewer systems. Manholes. Weirs.
Friday, 17/12/2021	Floods and Risk Management. (Prof. Prinos)	Types of Floods. Flood Mapping. Extreme Floods. Flood Risk Analysis. Vulnerability Analysis. Risk Assessment. Measures for risk reduction.