



Results from winter school at AUTH

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Workshop on the sustainability of the SWARM results
22 December 2021

This project has been funded with support from the European Commission. This publication reflects the views only of the author, and the Commission cannot be held responsible for any use which may be made of the information contained therein.

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Strengthening of master curricula in water resources
management for the Western Balkans HEIs and stakeholders
Project number: 597888-EPP-1-2018-1-RS-EPPKA2-CBHE-JP



Winter School AUTH

- Aristotle's University of Thessaloniki (AUTH) winter school on Water resources management took place virtually from 6/12/2021 to 17/12/2021.
- Principal aim was the introduction to students of the basic concepts of:
 - Sustainable and integrated water resources management
 - Hydraulics (open channels, river, water supply networks etc)
 - Hydrology and use of hydrological models and tools (e.g. GIS)

Courses and content

The lectures that were delivered had to do with:

Course	Short description of content
Sustainable Water resources management and EU legislation	Principles of sustainable water resources management. The WFD, shortcomings in implementation. Major relevant EU water legislation.
Hydraulics of open channels, rivers and dams	Flow in open channels and rivers. Calculation methods. Culverts and Bridges. Dam classification. Design Discharge. Spillways. Structures for energy dissipation.

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Courses and content

Course	Short description of content
«Άριστον μιν ύδωρ». Best is Water Pindar 518 – 438 BC Valuing the water	The value, the price and the cost of water. “The Diamond-Water Paradox”. Public or private? Social or economic? The changing water scene.
Water resources management and GIS (part 1)	Use of GIS for the management of environmental information. Open-source GIS tools and online data sources. Creation of water related maps.
Water resources management and GIS (part 2)	Spatial analyst techniques for the management of hydro-meteorological data. Application of GIS in EU’s Water Framework and Flood Directives.

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Courses and content

Course	Short description of content
Water resources management and hydrological modelling	The use of HEC-HMS model for hydrologic simulations. Data preparation and simulations. Exercise with GIS and HEC-HMS.
Global water crisis. SDG6 as a driver for sustainable development.	UN Agenda23, 2015-2030 SDG6 and its role to achieve sustainable development of our planet.
Water resources management and climate change	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.

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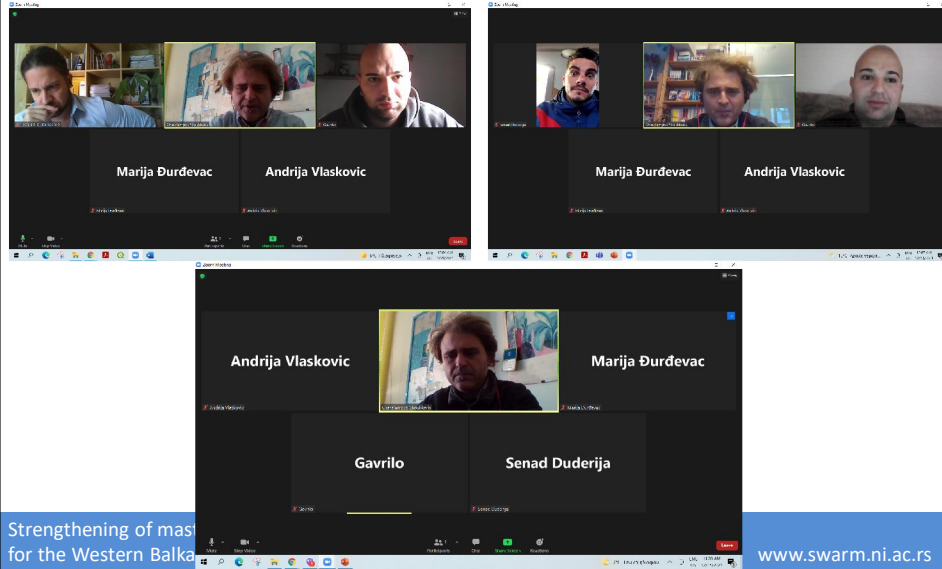
Courses and content

Course	Short description of content
Hydraulics of water supply and sewerage systems	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.
Floods and Risk Management.	Types of Floods. Flood Mapping. Extreme Floods. Flood Risk Analysis. Vulnerability Analysis. Risk Assessment. Measures for risk reduction.

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Photo material




Administrative/management issues

- ❖ A link (share point) with the presentations and the course material is shared with the students,
- ❖ A certificates of attendance will be delivered in each student.
- ❖ The students proceeded with the evaluation of the course through an online evaluation form



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

Evaluation form

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Logistic preparation (visa, invitations, enrolment) and organization of school *

Excellent

Very good

Good

Poor

Very poor

Content of the agenda *

Excellent

Very good

Good

Poor

Very poor

Arrangements of the event (venue, equipment, etc.) *

Excellent

Very good

Good

Poor

Very poor

Quality of delivered documentation *

Excellent


Very good


Good

Poor

Very poor

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Evaluation form

How do you rate the attention given to you? *

Excellent

Very good

Good

Poor

Very poor

Are you satisfied with the content of the lectures? *

Excellent

Very good

Good

Poor

Very poor

How do you rate social activities and possibilities to interact with others? *

Excellent

Very good

Good

Poor

Very poor

Engagement of the participants in the activities and discussions *

Excellent



Very good

Good

Poor

Very poor

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Evaluation form

How do you rate opportunities to be adventurous? * Usefulness of what you learned for your current studies and future profession? *



Excellent Excellent
 Very good Very good
 Good Good
 Poor Poor
 Very poor Very poor

In a general, how do you rate the classroom? * How would you rate the school you have been given? *

Excellent Excellent
 Very good Very good
 Good Good
 Poor Poor
 Very poor Very poor

Comment
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Advantages and disadvantages of the procedure

- ❖ Familiarization of students with ITCs
- ❖ Lack of inter communication
- ❖ Small number of students
- ❖ No cameras/microphones
- ❖ Difficulties in demonstrating programs and tools virtually
- ❖

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Ευχαριστώ!