

## SYLLABUS

### WEAP BEGINNER'S COURSE

#### Online Training

This online course set the beginning steps for the creation of a WEAP application. Participants of this course will be able to start constructing their own model for a specific region in a basin with urban and agricultural demand sites. At the end of this course, you will

- Know how to start creating a WEAP area for a specific region
- Be able to incorporate data regarding urban water use and agricultural demands
- Understand supply and demand analysis performed in WEAP
- Know how to create and run scenarios
- Obtain and understand results

### NEEDS AND RESOURCES

#### REQUIRED BACKGROUND

To successfully complete this course, you must

- Be familiar with basic computational tools
- Understand or have an interest in water resources and water distribution in the basin
- Engage in online course and ask questions when needed

#### REQUIRED MATERIALS

To successfully complete this course, you will need

- WEAP Tutorial available online <https://www.weap21.org/Tutorial>
- Download, install and test run WEAP Software: <https://www.weap21.org/Download>
- Personal Computer with headset and microphone
- An additional monitor to follow course presentation and perform tasks in WEAP

## COURSE SCHEDULE

### *CREATE YOUR AREA*

Tutorial: WEAP in an Hour

New Study Area

Setting general Parameters

Schematic: Entering Elements

### *USING WEAP*

Tutorial: Basic Tools

Key Assumptions

Expression Builder

### *SCENARIOS*

Tutorial: Scenarios

Creating and Running Scenarios

### *DEMAND ANALYSIS*

Tutorial: Refining the Demand Analysis

Disaggregating Demand

Modeling Demand site Management, Losses and Reuse

Setting Demand Allocation Priorities

### *REFINING THE SUPPLY*

Tutorial: Refining the Supply

Supplies Priorities

Modeling Reservoirs

Adding Flow Requirements

Modeling Groundwater Resources

### *RESULTS*

Tutorial: Data, Results and Formatting

Exchanging Data

Importing Time Series

Working with Results and Formatting

### *RESERVOIRS AND POWER PRODUCTION*

Tutorial: Reservoirs and Power Production

Modeling Reservoir Operations

Adding Hydropower Computation

**Modeling Catchments**

**Simplified Coefficient Method**

**Soil Moisture Model**

**Simulating Surface Water-Groundwater Interaction**

*FINAL QUESTIONS*

**CONTACT INFORMATION**

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