

**Horizon 2020 Capacity Building/Mediterranean Environment Programme**

**“Wastewater treatment and Reuse”**

**9-11 March 2011, Beirut, Lebanon**

**Course evaluation**



Evaluation form for course:

Horizon 2020, Wastewater treatment and Reuse, 9-11 March 2011, Beirut, Lebanon

Learning objectives:

To promote the interaction between drinking water consumption and waste water production; to introduce wastewater reuse through integrated water resources management; to spread knowledge on technologies and technology selection.

Note: Please, grade the four statements below by using the following numbers indicating your opinion:

- 5 I strongly agree
- 4 I agree
- 3 Neutral
- 2 I disagree
- 1 I strongly disagree
- 0

**GENERAL IMPRESSION**

	GRADE	No.RES
The course enabled me to achieve learning objectives as stated above	4.4	15
The total available time (4 days) is reasonable for the amount of material to be studied	3.8	15
The balance between theory and practice is right	4.0	15
The course is evaluated in an appropriate way	4.4	14
Useful to have all lecturing material on the stick and H2020 website	4.9	15
<b>AVERAGE GRADE</b>	4.3	

Note: Please, evaluate each subject/activity/teacher on the following statements by also using the grades above.

- A) The subject is relevant for me as a professional
- B) The lecturer gives a clear presentation and is straightforward to follow
- C) The materials (notes, hand-outs, etc.) are clear and well structured
- D) There is sufficient possibility for questions and discussion

Sess.	SUBJECT	ACTIVITY	LECTURER	No. RESPONSES				AVERAGE GRADE
				15	17	17	17	
				GRADES				AVERAGE GRADE
				A	B	C	D	
1.2	Introduction: (global) status of sanitation	Lecture	Hooijmans	4.4	4.5	4.5	4.6	4.5
1.3	EU water projects	Lecture	Hooijmans	4.3	4.5	4.4	4.6	4.4
1.4	Pollution of the marine environment	Lecture	Moussa	4.5	4.6	4.6	4.7	4.6
1.6	Problem analysis	Lect./exer	Hooijmans	4.5	4.7	4.5	4.6	4.6
1.7	Objectives analysis	Lect./exer	Hooijmans	4.4	4.8	4.6	4.6	4.6
2.1	Wastewater treatment technologies overview	Lecture	Moussa	4.8	4.7	4.6	4.6	4.7
2.2	Decentralized treatment	Lecture	Moussa	4.6	4.7	4.5	4.6	4.6
2.3	MHSIP-PPIF experience in Lebanon	Lecture	Akl	3.9	4.5	4.6	4.6	4.4
2.4	WHO guidelines for reuse	Lecture	Hooijmans	4.4	4.6	4.5	4.6	4.5
2.5	Project UTF/LEB/019/LEB	Lecture	Nemer	4.3	3.8	3.8	3.9	4.0
2.6	Reuse of wastewater and sludge	Lecture	Moussa	4.8	4.6	4.4	4.6	4.6
2.7	Financial aspects of wastewater management	Lecture	Quteishat	4.2	4.5	4.3	4.5	4.4
2.8	Option analysis	Lect./exer	Hooijmans	4.3	4.4	4.5	4.6	4.4
3.1	Technology selection	Lecture	Hooijmans	4.7	4.6	4.5	4.6	4.6
3.2	Technology selection coastal area Spain	Lecture	Hooijmans	4.5	4.6	4.5	4.6	4.6
3.3/4	Technology selection coastal area Spain	Computer Exercise	Hooijmans	4.3	4.7	4.5	4.6	4.6
3.5	Selection of most preferred option using WAWTTAR	Exercise	Hooijmans	4.5	4.7	4.7	4.7	4.7
3.6	Final presentation	Exercise	Hooijmans	4.5	4.6	4.6	4.6	4.6
<b>OVERALL ASSESSMENT OF THE MODULE</b>				<b>GRADE</b>	<b>No.RES</b>			
5-very good, 4-good, 3-moderate, 2-bad, 1-very bad				4.6	14			



### Which aspects of the course you **liked very much** ?

The software part which covers everything needed in a short period of time.  
 The WAWTTAR software application and the lecturers enthusiasm and professionalism.  
 Organizers and lecturers were all responsible people and their interest at high level, objectives are of high value.  
 Simplification of breakdown of org. compound to organic and inorganic compounds.  
 Finding ways to reach the conclusion within the required time.  
 Pollution of the marine environment (3x).  
 Selection of the most preferred option using WAWTTAR (11x).  
 Wastewater treatment technologies (4x).  
 Reuse of wastewater and sludge (3x).  
 Decentralized treatment (3x)  
 Technology selection (2x).  
 MHSIP-PPIF experience in Lebanon.  
 The balance between theory and practice.  
 Financial aspects (2x).  
 Problem analysis and objectives analysis and options analysis (4x).

### Do you have suggestions for **improvement**?

More case studies could help esp. that we have different criteria and conditions to implement wwtp in the country.  
 More specialised courses for professionals.  
 Site visit to wwtp (4x).  
 More participant from other countries and universities and ministries.  
 To go in more details explaining the treatment technologies and discussing about technical problems faced in the technologies during operation.  
 To provide a printed copy of the slides before the workshop with an empty paragraph on the right to take notes.  
 More lectures on local context.  
 More time (2x)  
 Time should be 4 days instead of 3 (1x).  
 I suggest that the material be given more time (4x).

### Were there topics that you **missed** in the course? If so, which ones?

Additional information on the advantages and disadvantages of each process in addition to % removal.  
 No (12x).  
 We did not get the time to discuss in details which are the best technologies to use in Lebanon (rural and urban).  
 Suggest to open this capacity building sessions for professionals from the private sector.  
 Lebanese examples within the context of the course.  
 How to calculate.

### Any other **comments / suggestions**?

Providing some onsite training for people working in a wwtp (2x).  
 No (5x).  
 Thank you and hope to meet in the future.  
 The specified time for this course should have been longer,  
 Thank you for the training, it was very interesting and I learned a lot from it. In my opinion, you should change some lectures to meet with the actual situation of Lebanon.  
 Thank you!  
 Documents on the operation of wwtp at all stages and laboratory analysis.  
 I liked the separation in analyzing the problem and finding a solution.  
 Very good work, maybe detailed analysis of laboratory analysis.

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In summary it can be concluded that the course was assessed as being very good, this was also valid for the lecturers. Improvement can only be realized in increasing the length of the course, like adding a site visit to a wastewater treatment plant and spend some time on a Lebanon case.

This was the second course under the topic of Wastewater Treatment and Reuse. The first course was given in Jordan. Based on the evaluation of the Jordan course and the experience of the lecturers small modifications were made to keep the amount presented and discussed within the time available. Also the EU project Exact, which was presented in Jordan, was not part of the curriculum. This resulted in an improved, coherent course, which was endorsed by the outcome of the participants' evaluation of the course.