



**ERASMUS+ PROGRAMME**

**Project Number: 573927-EPP-1-2016-1-JO-EPPKA2-CBHE-JP**

**EGREEN:**

**Development of Environmental Engineering Courses and Injection of Climate Change Concept For Undergraduate Curriculum**

**Minutes  
of  
The Syrian and Jordanian Meeting**

**The University of Jordan  
Amman-Jordan**

**April 22, 2019**



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## The Syrian and Jordanian Meeting

April 22, 2019

**Participants list:**

No.	Participant Name	Position
<b>The University of Jordan (UJ)</b>		
1.	Prof. Ahmed Al-Salaymeh	EGREEN Project Coordinator
2.	Prof. Mohammad Hamdan	Professor at Mechanical Engineering Department
3.	Dr. Osama Ayadi	Assistant Professor at Mechanical Engineering Department
4.	Eng. Leena Marashdeh	Research Assistant at School of Engineering
5.	Ms. Hanan Hasan	Research Assistant at School of Engineering
6.	Mr. Mamoun Dmour	Technician Information Technology Center
<b>The German-Jordanian University (GJU)</b>		
7.	Dr. Omaimah Al-Arja	Professor at Engineering Faculty
8.	Eng. Hamzeh Alnawafah	Project Assistant
<b>Al al-Bayt University (AABU)</b>		
9.	Dr. Moayyad shawaqfeh	Faculty member
10.	Eng. Ibthah Al-Qudah	Engineer
<b>Al-Zaytoonah University of Jordan (ZUJ)</b>		
11.	Dr. Loai Dabbour	Chairman at Architecture department
12.	Eng. Eman Abdelhafez	Faculty member
<b>Mutah University (MUTAH)</b>		
13.	Prof. Omer Maaitah	Dean of the Faculty of Graduate Studies
14.	Prof. Bassam Mahasneh	Faculty member
<b>Jordan University of Science and Technology (JUST)</b>		
15.	-	
<b>Al-Baath University (ABU)</b>		



16.	Prof. Adnan Ghata	Professor at Chemical Engineering Department
<b>Tishreen University (TU)</b>		
17.	Prof. Moussa Al Samara	The Dean of the higher Institute for Environmental Research
<b>Aleppo University (AU)</b>		
18.	Prof. Khalaf ALABDULLAH	Faculty member at AU

## The Opening Session

Prof. Ahmed Al-Salaymeh, Egreen General Coordinator, welcomed all participants and delivered a presentation about the progress in EGREEN project.

**Session (1)**  
**Chaired by Prof. Ahmed Al-Salaymeh (UJ)**

Courses leaders presented the prepared material in Arabic and English and discussed the received quality check from the European partners.

### WP3: Development of Study Plan and Curricula

Title	Major Activities	Coordination			Estimated Start\END Date	
		Coordinator	Co-Coordinator	Other partners involved		
<b>WP3: Development of Study Plan and Curricula</b>	<b>Task 3.1:</b> Workshop on Curricula Updating	HS-OWL	ZUJ, MUTAH, TU	All	1/9/2017	1.8.2017 To 1/4/2018
	<b>Task 3.2:</b> Selection of Pilot Courses and Labs				1/11/2017	
	<b>Task 3.3:</b> Detailed Design of Pilot Courses				1/2/2018	
	<b>Task 3.4:</b> Accreditation of New Curricula				1/6/2018	
	<b>Task 3.5:</b> New Curricula for environment Courses				15/9/2018	
	<b>Task 3.6:</b> Establishment of Environmental lab				15/4/2018	
	<b>Task 3.7:</b> Monitoring and Feedback Methodology and Reports				1/10/2018	



No.	Task	Responsibility	Due Date
1.	Organize the courses folder to include the following sub-folders: 1- Collected Presentations Folder 2- Final Material Folder: ✓ Arabic Folder ✓ English Folder	JO Partners SY Partners	Ongoing
2.	The courses which weren't reviewed yet, should be sent to European partner universities for Technical review	GJU	April 23, 2019
3.	The technical review comments will be sent to courses leader and Quality leader	GJU	After receiving the comments
4.	GJU will check the format and template of the final courses after all technical issues	GJU	May 15, 2019
5.	Comments of the Quality Check have to be taken into consideration. Leaders should respond to these comments and enhance the final material	Courses leaders	June 15, 2019
6.	Send the final version of the courses to UJ team to be uploaded the platform.	GJU	June 30, 2019
7.	Provide Summary of courses that is implemented for Spring semesters 2019	JO Partners SY Partners	April 23, 2019
8.	Post-Course survey to be distributed to students for implemented courses	JO Partners SY Partners	May 30, 2019
9.	Analyses and preparation a report of the surveys by each faculty member for his implemented course	JO Partners SY Partners	May 30, 2019

**Course leaders and committees**

Clusters	Course Title	EU Committee	JO, SY Committee	Responsible university to submit final teaching material
<b>Cluster 1</b>	Water Resources Engineering including non-conventional water recourses	Prof. Joachim Fettig (HS-OWL)  Dr. Paulo Baptista (P&B)	Prof. Adnan Ghata (ABU) Prof. Abd-alsasser Alaaraj (ABU) Prof. Omer Maaitah (MUTAH) Dr. Mo'ayyad Shawaqfah (AABU)	Dr. Mo'ayyad Shawaqfah (AABU)  Arabic version: Prof. Adnan Ghata (ABU)
<b>Cluster 2</b>	Introduction to Water and Wastewater Treatment including Bio-Techniques for Waste Water Treatment	Prof. Martin Oldenburg (HS-OWL)	Prof. Adnan Ghata (ABU) Prof. Fahmi Abu Al-Rub (JUST) Prof. Juliet Saloum(TU) Prof. Ahmad Abu-Yaghi (UJ) Dr. Muna Hindiyeh (GJU) Dr. Mo'ayyad Shawaqfah (AABU)	Dr. Mo'ayyad Shawaqfah (AABU)  Arabic version: Prof. Adnan Ghata (ABU)
<b>Cluster 3</b>	Design of Sustainable Buildings including Energy efficient building services	Prof. Wolfgang Streicher (UIBK)	Dr. Loui Dabbour (ZUJ) Dr. Hamzeh Ali (ABU)	Dr. Loui Dabbour (ZUJ)  Arabic version: Prof. Adnan Ghata (ABU)
<b>Cluster 4</b>	Air Pollution and Air Quality Management	Prof. Klaus Maßmeyer (HS-OWL)	Dr. Mo'ayyad Shawaqfah (AABU) Prof. Khalaf Alabdullah (AU) Prof. Adnan Ghata (ABU) Prof. Ahmed Al-Mahmoud (ABU) Prof. Mohammad Hamdan (UJ) Prof. Ahmad Abu-Yaghi (UJ)	TU Arabic version: TU
<b>Cluster 5</b>	Environmental engineering and sustainable development	Prof. Martin Kaltschmitt (TUHH)	Prof. Fahmi Abu Al-Rub (JUST) Prof. Moussa Al-Samara (TU) Prof. Ahmad Abu-Yaghi (UJ) Dr. Muna Hindiyeh (GJU) Dr. Mo'ayyad Shawaqfah (AABU)	Prof. Moussa Al-Samara (TU)  Arabic version: Prof. Moussa Al-Samara (TU)



<b>Cluster 6.a</b>	Introduction to Environment and Climate Change	Dr. Eduardo Luís Cardoso (UCP) Prof. Klaus Maßmeyer (HS-OWL)	Prof. Moussa Al-Samara (TU) Dr. Mo'ayyad Shawaqfah (AABU) Dr. Saeb Khresat (JUST) Dr. Muna Hindiyeh (GJU)	Dr. Eduardo Luís Cardoso (UCP) Dr. Mo'ayyad Shawaqfah (AABU)  Arabic version: Prof. Moussa Al-Samara (TU)
<b>Cluster 6.c</b>	6.c Environmental Monitoring Systems (New Course)	Dr. Eduardo Luís Cardoso (UCP) Prof. Burkhard Wrenger (HS-OWL) Prof. Klaus Maßmeyer (HS-OWL)	Prof. Adnan Ghata (ABU) Prof. Ahmed Al-Mahmoud (ABU) Prof. Khalaf Alabdullah (AU) Prof. Moussa Al-Samara (TU) Prof. Ahmad Abu-Yaghi (UJ) Dr. Muna Hindiyeh (GJU)	AU Arabic version: AU
<b>Cluster 7</b>	Energy Resources and Engineering and Energy conversion Technologies	Prof. Martin Kaltschmitt (TUHH) Prof. Wolfgang Streicher (UIBK)	Prof. Mohammad Hamdan (UJ) Eng. Razan Al Rhia (TU) Dr. Loui Dabbour (ZUJ) Dr. Zayed Al-Hamamre (UJ)	Prof. Mohammad Hamdan (UJ)  Arabic version: Prof. Moussa Al-Samara (TU)
<b>Cluster 8</b>	Design of Renewable Energy Systems	Prof. Martin Kaltschmitt (TUHH) Prof. Wolfgang Streicher (UIBK) Prof. Salman Ajib (HS-OWL) Dr. Eduardo Luís Cardoso (UCP)	Prof. Suhil Kiwan (JUST) Prof. Ahmed Al-Salaymeh (UJ) Prof. Mohammad Smairan (AABU) Prof. Chehadeh Moussa (ABU) Prof. Shoaib Mahmoud (TU)	Prof. Suhil Kiwan (JUST)  Arabic version: Prof. Chehadeh Moussa (ABU)
<b>Cluster 9</b>	Heating Ventilating and Air Conditioning Systems including solar energy driven system	Prof. Wolfgang Streicher (UIBK) Prof. Salman Ajib (HS-OWL)	Dr. Mohammad Majali (MUTAH) Dr. Osama Ayadi (UJ) Eng. Eman Abdelhafez (ZUJ) Prof. Suhil Kiwan (JUST) Dr. Mohammad Al-Rbai (UJ)	Dr. Osama Ayadi (UJ) Arabic version: Prof. Moussa Al-Samara (TU)
<b>Cluster 10</b>	Power and Refrigeration Cycles	Prof. Salman Ajib (HS-OWL) Prof. Wolfgang Streicher (UIBK)	Prof. Mohammad Hamdan (UJ) Dr. Mohammad Majali (MUTAH) Prof. Suhil Kiwan (JUST) Dr. Osama Ayadi (UJ)	Eng. Eman Abdelhafez (ZUJ) Arabic version: AU



<b>Cluster 11</b>	Modelling and simulation of power plant cycles (new)	Prof. Salman Ajib (HS-OWL)	Prof. Suhil Kiwan (JUST) Dr. Mohammad Majali (MUTAH) Eng. Scandar Hadad (TU)	Dr. Mohammad Majali (MUTAH) Arabic version: AU
<b>Cluster 12</b>	Waste Resource Management including Solid Waste Management	Prof. Martin Kaltschmitt (TUHH)	Dr. Mo'ayyad Shawaqfah (AABU) Dr. Rasin Zakieh (ABU) Dr. Muna Hindiyeh (GJU) Dr. Loui Dabbour (ZUJ) Dr. Zayed Al-Hamamre (UJ) Dr. Mohammad Al-Rbai	Dr. Rasin Zakieh (ABU) Arabic version: ABU