

## **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

Agenda
of
The sixth Steering Committee Meeting
and Training Workshops

The University of Jordan
Amman-Jordan

December 17-20, 2018





Day 1			
Tuesday, December 18, 2018			
	STC meeting		
8:30-09:00	Registration		
09:00-09:30	Welcoming Presentation on the progress of EGREEN Project by the General Coordinator of the Project, Prof. Ahmed Al-Salaymeh  ✓ Status of Work packages  ✓ Strategy for implementation		
	Session (1-A)		
	Chaired by Prof. Martin Kaltschmitt (TUHH)		
9:30-10:00	WP3: Development of Study Plan and Curricula Action plan by Prof. Salman Ajib (OWL-UAS)  ✓ Presenting the final outline for the 13 courses including ECTS component  ✓ Plan for Detailed Design of Pilot Courses  ✓ Pilot courses implementation  ✓ Accreditation of New Curricula  ✓ Establishment of Environmental labs  ✓ Monitoring and Feedback Methodology and Reports (Quality plan)		
10:00-10:30	WP4: Development of Online Content and Competencies by Dr. Eduardo Cardoso  (UCP)  ✓ EGREEN e- Learning Environment ✓ Adopted teaching methodologies ✓ Piloting phase ✓ Next training workshop		
10:30-11:00	WP5: Capacity Building by Prof. Martin Kaltschmitt (TUHH)  ✓ Development a Capacity Building Programme  ✓ Plan for Academic Visits to EU Partners  ✓ Plan for Students Visits to EU Partners  ✓ Plan for EU visits to Jordan/Syria  ✓ Plan for local Training Workshops in environment in Jordan and Syria		
Session (1-B)			
9:30-11:00	ToT Session, Title: Water Related Courses Prof. Joachim Fettig (HS-OWL)		
11:00-11:30	Coffee Break + Group Photo		
Session (2-A) Chaired by Prof. Salman Ajib			
11:30-12:00	WP1: Networking by Prof. Fahmi Abu Al-Rub (JUST)  ✓ Final list of members		





	✓ Action plan to enhance networking benefits and engage Stakeholders
12:00-12:30	WP7: Dissemination and Sustainability by Prof. Adnan Ghata (ABU) & Eng. Eman (ZUJ)  ✓ Conducted activities ✓ Action plan to implement next activities ✓ Next issue of newsletter ✓ Project website
12:30-13:00	WP6: Monitoring and Evaluation by Prof. Alaaldeen Al-Halhouli (GJU)  ✓ Evaluation surveys for the conducted training workshops  ✓ Quality and impact survey for piloting phase  ✓ Quality tools (checklist) to review produced teaching material  ✓ External Evaluation  ✓ Prepare and submit Progress reports
	Session (2-B)
11:30-13:00	ToT Session, Title: Environmental Monitoring Systems Prof. Burkhard Wrenger (HS-OWL)
13:00-13:30	Snack Break
	Session (3-A) Chaired by Prof. Burkhard Wrenger (HS-OWL)
	Cluster 1: Water Resources Engineering including non-conventional water
13:30-13:50	recourses  By Dr. Mo'ayyad Shawaqfah (AABU), Prof. Adnan Ghata (ABU) (Arabic Version)  Prof. Joachim Fettig (HS-OWL), Dr. Paulo Baptista (P&B)
13:50-14:00	Discussion
14:00-14:20	Cluster 2: Water and Wastewater Treatment including Bio-Techniques for Waste Water Treatment  Dr. Mo'ayyad Shawaqfah (AABU) and Prof. Adnan Ghata (ABU) (Arabic Version)  Prof. Martin Oldenburg (HS-OWL)
14:20-14:30	Discussion
14:30-14:50	Cluster 6.a: Introduction to Environment and Climate Change Dr. Mo'ayyad Shawaqfah (AABU) and Prof. Moussa Samara (Arabic version) Prof. Martin Kaltschmitt (TUHH), Dr. Eduardo Luís Cardoso (UCP), Prof. Klaus Maßmeyer (HS-OWL)
	Cluster 6.c: Environmental Monitoring Systems (New Course) AU (English version+ Arabic version) Dr. Eduardo Luís Cardoso (UCP), Prof. Burkhard Wrenger (HS-OWL), Prof. Klaus Maßmeyer (HS-OWL)
14:50-15:00	Discussion
14.50-15.00	





Session (3-B)		
13:30-15:00	TOT Session, Title: Energy Efficient Buildings – Passive measures in different climates Prof. Wolfgang Streicher (UIBK)	
15:00-15:30	Coffee break	
	Session (4-A)	
Chaired by Prof. Joachim Fettig (HS-OWL)		
	Cluster 4: Air Pollution and Air Quality Management	
15:30-15:50	Prof. Moussa Samara (English version+ Arabic version)	
	Prof. Klaus Maßmeyer (HS-OWL)	
15:50-16:00	Discussion	
	Cluster 5: Environmental engineering and sustainable development	
16:00-16:20	Prof. Moussa Samara (English version+ Arabic version)	
	Prof. Martin Kaltschmitt (TUHH)	
16:20-16:30	Discussion	
	Cluster 12: Waste Resource Management including Solid Waste Management	
16:30-16:50	Dr. Rasin Zakieh (ABU) for English and Arabic versions	
	Prof. Martin Kaltschmitt (TUHH)	
16:50-17:00	Discussion	
Session (4-B)		
15.20 17.00	TOT Session, Title: Thermal building simulation	
15:30-17:00	Dr. Martin Hauer (UIBK)	
Session (5-A)		
17:00-18:00	TOT Session, Title: ELearning in the Egreen Project	
	Trainer: Dr. Eduardo Cardoso (UCP) and Dr. Paula Castro (UCP)	
18:30	Dinner	





Day 2			
Wednesday, December 19, 2018			
STC meeting			
Second Day Session (1-A)			
	Chaired by Prof. Wolfgang Streicher (UIBK)		
	Cluster 3: Design of Sustainable Buildings including Energy efficient building		
	services		
9:30-9:50	Dr. Loui Dabbour (ZUJ) (English version), and Prof. Adnan Ghata (ABU) (Arabic		
	Version)		
	Prof. Wolfgang Streicher (UIBK)		
9:50-10:00	Discussion		
	Cluster 7: Energy Resources and Engineering and Energy conversion Technologies		
10:00-10:20	Prof. Mohammad Hamdan (UJ) and Prof. Moussa Al-Samara (TU) (Arabic version)		
	Prof. Martin Kaltschmitt (TUHH), Prof. Wolfgang Streicher (UIBK)		
10:20-10:30	Discussion		
	Cluster 8: Design of Renewable Energy Systems		
10:30-10:50	Prof. Suhil Kiwan (JUST) and Prof. Chehadeh Moussa (ABU) (Arabic version)		
10:30-10:30	Prof. Martin Kaltschmitt (TUHH), Prof. Wolfgang Streicher (UIBK), Prof. Salman Ajib		
	(HS-OWL), Dr. Eduardo Luís Cardoso (UCP)		
10:50-11:00	Discussion		
11:00-11:20	Coffee Break		
	Second Day Session (2-A)		
	Chaired by Prof. Alaaldeen Al-Halhouli (GJU)		
	Cluster 9: Heating Ventilating and Air Conditioning Systems including solar energy		
11:20-11:40	driven system		
11.20 11.40	Dr. Mohammad Majali (MUTAH), Prof. Moussa Al-Samara (TU), Dr. Osama Ayadi (UJ)		
	Prof. Wolfgang Streicher (UIBK), Prof. Salman Ajib (HS-OWL)		
11:40-11:50	Discussion		
	Cluster 10: Power and Refrigeration Cycles		
11:50-12:10	Eng. Eman Abdelhafez (ZUJ) and AU (Arabic version)		
	Prof. Salman Ajib (HS-OWL), Prof. Wolfgang Streicher (UIBK)		
12:10-12:20	Discussion		
12:20-12:40	Cluster 11: Modelling and simulation of power plant cycles (new)		
	Dr. Mohammad Majali (MUTAH) via Skype and AU (Arabic version)		
	Prof. Salman Ajib (HS-OWL)		
12:40-12:50	Discussion		
13:00-13:30	Snack Break		





## Session (3-A)

## **Chaired by Prof. Suhil Kiwan (JUST)**

Project Implementation presentation by Partner universities in Jordan and Syria (each university 10 min) covering the following topics

- ✓ EGREEN team
- ✓ Achievements in Networking
- ✓ Achievement in WP3 (Role in development process, Final list of courses, Accreditation letter, offered courses next semester and number of enrolled students)
- ✓ Equipment procurement, installation place and usage (supported with photos)
- ✓ Conducted dissemination activities
- ✓ Conducted Quality activities (Submitted progress reports)
- ✓ Pre and post

13:30-13:40			
13:50-14:00	13:30-13:40	❖ P1: The University of Jordan, by Prof. Ahmed Al-Salaymeh	
14:00-14:10	13:40-13:50	❖ P2: German Jordanian University by Alaaldeen Al-Halhouli	
14:10-14:20	13:50-14:00	P3: Al Albayt University by Dr. Mo'ayyad Shawaqfah	
14:20-14:40	14:00-14:10	P4: Al-Zaytoonah University of Jordan by Dr. Loai Dabbour	
14:40-14:50	14:10-14:20	P5: Mutah University by Prof. Omer Nawaf Maaitah	
14:50-15:00	14:20-14:40	P6: Jordan University of Science and Technology, by Prof. Fahmi Abu Al-Rub	
15:00-15:10	14:40-14:50	P7: Al-Baath University, by Prof. Adnan Ghata	
Session (3-B)  13:30-15:10 TOT Session, Title: Wind Offshore Prof. Martin Kaltschmitt (TUHH)  15:10-15:30 Coffee Break  Session (4-A) Chaired by Prof. Ahmed Al-Salaymeh  15:30-17:00 Conclusions and action plan for project  Session (4-B)  TOT Session, Title: Biogas	14:50-15:00	❖ P8: University of Aleppo, by Prof. Khalaf Alabdullah	
13:30-15:10  TOT Session, Title: Wind Offshore Prof. Martin Kaltschmitt (TUHH)  15:10-15:30  Coffee Break  Session (4-A) Chaired by Prof. Ahmed Al-Salaymeh  15:30-17:00  Conclusions and action plan for project Session (4-B)  TOT Session, Title: Biogas	15:00-15:10	P9: Tishreen University, by Prof. Moussa Al-Samara	
13:30-15:10 Prof. Martin Kaltschmitt (TUHH)  15:10-15:30 Coffee Break  Session (4-A) Chaired by Prof. Ahmed Al-Salaymeh  15:30-17:00 Conclusions and action plan for project  Session (4-B)  TOT Session, Title: Biogas		Session (3-B)	
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Session (4-B)  15:30-17:00  TOT Session, Title: Biogas		Chaired by Prof. Ahmed Al-Salaymeh	
TOT Session, Title: Biogas	15:30-17:00	Conclusions and action plan for project	
15:30-17:00	Session (4-B)		
15:30-17:00			
Prof. Martin Kaltschmitt (TUHH)	15:30-17:00	TOT Session, Title: Biogas	
		Prof. Martin Kaltschmitt (TUHH)	
18:00 Dinner	18:00	Dinner	



Day 3 Thursday, December 20, 2018 Train of Trainer workshop		
Session (1)		
9:00-10:00	TOT Session, Title: Solar Thermal Systems  Trainer: Prof. Wolfgang Streicher	
10:00-10:15	Coffee Break	
Session (2)		
10:15-12:00	TOT Session, Title: Heat Pump Systems  Trainer: Prof. Wolfgang Streicher	