



**Project Title:** Modernising Undergraduate Renewable Energy Education: EU Experience for Jordan

**Acronym:** MUREE

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The Quality Committee has identified three major areas of intervention, namely:

- Evaluation of results and processes in terms of fulfillment of original objectives
- Evaluation of results and processes in terms of implementation
- Evaluation of results and processes in terms of compliance with EU and internal standards/regulations.

In each one of these areas, the committee has elaborated concrete methods and tools to evaluate the development and the results of the project in accordance to applicable EU and internal regulations.

These methods will be utilized throughout the project and will be the basis to elaborate the midterm and end evaluation of the project performed by external evaluators and the internal quality committee.

The Monitoring and Evaluation Plan and the elaborated forms are shown in Appendix (1) and Appendix (2) respectively.

## Appendix (1): The Monitoring and Evaluation Plan

Activity	Responsible
Development of evaluation forms (Lecturers / Programs)	TUB
Evaluation of entrepreneurial capacity building	IGFOTON/NET ENERGY
Certification of developed curricula	Module responsible
Evaluation of equipment's purchasing processes	TUB / PSUT
Development of partners agreement template (equipment & resources)	PSUT
Evaluation of curriculum's relevance for the industry requirements	NET ENERGY
Monitoring of addressed target market (statistics/gender quote, etc)	MUTAH
Standardization of report formats (MUREE and TEMPUS formats)	PSUT
Elaboration of mid-term and final quality reports	M. Blakemore/TUB

### Description

- 1. Development of evaluation forms (Lectures Programs):** The TUB has developed a set of methods and questionnaires to evaluate the performance of the MUREE courses and lecturers. The questionnaires intend to assess the perception of the student body during the beginning and after the end of the individual courses. Expectations prior to the beginning of the course, impressions after its conclusion, effective transferred knowledge and assessment of lecturers' competences are to be obtained after the conduction of these evaluations.
- 2. Evaluation of entrepreneurial capacity building:** The IGFOTON Company has elaborated specialized questionnaires to assess prior and acquired knowledge transferred during the entrepreneurial workshops conducted by the industry partners of the consortium. The intention of this questionnaire is to evaluate the impact in the entrepreneurial spirit of the young students of the program.
- 3. Certification of developed curricula:** both, the respective Jordanian and European partners responsible for the development of the individual modules, will evaluate them. By doing this, both, the content's quality and its correct implementation in Jordanian Classrooms are secured.
- 4. Evaluation of Equipment's Purchasing Processes:** The PSUT, in collaboration with the TUB is responsible to secure, that the purchasing of the equipment is done following the EU Commission regulations.
- 5. Development of partner's agreement template (equipment & resources):** The PSUT is responsible for the development of a partner's agreement concerning the equipment's



purchase in order to secure consensus and enable accessibility to every Jordanian consortium member.

**6. Evaluation of curriculum's relevance for the industry requirements:** The industry partner NETENERGY will be responsible of the development of a survey among representatives of the Jordanian renewable industry branch. The survey will help to assess the impact that MUREE courses will have concerning the expectations the local industry has of young engineers.

**7. Monitoring of addressed target market (statistics/gender quote, etc):** in accordance to the proposal objectives, the MUTAH will realize studies on the demographical distribution of the participants in the MUREE courses.

**8. Standardization of report formats (MUREE and TEMPUS formats):** The PSUT is responsible for the upholding of internal MUREE and Tempus formats for reports, figures, courses, etc. The PSUT is responsible as well for the communication of these standards.

**9. Elaboration of mid-term and final quality reports:** the TUB, together with the external quality evaluator, Professor Mike Blakemore, will be responsible for the elaboration of a midterm and final internal evaluation on quality issues.



**Appendix (2): Evaluation Forms (Lecturers/Programs)**

**Modernising Undergraduate Renewable Energy Education:  
EU Experience for Jordan  
MUREE  
Project Number: 530332-TEMPUS-1-2012-1-JO-TEMPUS-JPCR  
Survey for Course Evaluation**

Mark the space provided with a cross to indicate the grade you consider most appropriate. (1 = Totally disagree to 5 = Totally agree )	Totally Disagree			Totally Agree	
	1	2	3	4	5
<b>Concept</b>					
The goals of the lecture are clear.	<input type="checkbox"/>				
The lecture is well-structured.	<input type="checkbox"/>				
The practical orientation of the content is supported well with examples.	<input type="checkbox"/>				
Connections with other specialist fields are shown.	<input type="checkbox"/>				
Exercises are co-ordinated with the lectures.	<input type="checkbox"/>				
<b>Contents</b>					
The work load of the lecture is appropriate.	<input type="checkbox"/>				
The subject content of the module is up-to-date.	<input type="checkbox"/>				
The requirement profile and the level of difficulty of the lectures are appropriate to my previous knowledge.	<input type="checkbox"/>				
Content overlaps with that of other lectures within the GPE program.	<input type="checkbox"/>				
The importance of the subject dealt with is perceptible.	<input type="checkbox"/>				
<b>Hand-outs and Script</b>					
Hand-outs help to understand the lecture.	<input type="checkbox"/>				
The script is electronically available.	<input type="checkbox"/>				
<b>Lecture / Lecturer</b>					
The pronunciation of the lecturer is clear.	<input type="checkbox"/>				
The topics taught are comprehensible; and there is sufficient time to follow them.	<input type="checkbox"/>				
The use of teaching aids and media is appropriate.	<input type="checkbox"/>				
The lecturer have a good knowledge of the subject.	<input type="checkbox"/>				
The lecturer produces interest in the subject.	<input type="checkbox"/>				
The lecturer makes sure that the subject was understood.	<input type="checkbox"/>				
The lecturer seems open-minded and approachable.	<input type="checkbox"/>				
I would recommend lectures of this lecturer to other students. Or Provide an overall rating of your instructor.	<input type="checkbox"/>				
How do you mark the lecture?	<input type="checkbox"/>				

Exercise/Tutor					
The pronunciation of the tutor is clear.	<input type="checkbox"/>				
The topics taught are comprehensible; there is sufficient time to follow	<input type="checkbox"/>				
The use of teaching aids and media is appropriate.	<input type="checkbox"/>				
The tutor show's to have a good knowledge at the subject.	<input type="checkbox"/>				
The tutor produces interest in the subject.	<input type="checkbox"/>				
The tutor makes sure that the subject was understood.	<input type="checkbox"/>				
The tutor seems open-minded and approachable.	<input type="checkbox"/>				
How do you mark the lecture? 1 = A, 2 = B, 3 = C, 4 = D, 5 = F	<input type="checkbox"/>				
Summary					
The quality of the course is high.	<input type="checkbox"/>				
I think that I have increased my knowledge through the lecture	<input type="checkbox"/>				
I think I can apply what I have learned in the lecture.	<input type="checkbox"/>				
Examination standards were made clear in the lecture.	<input type="checkbox"/>				
I assimilated the subject matter of this course mainly through the 1 = attending lecture 2 = attending exercises, 3 = reading script/ other hand-outs for the lecture, 4 = reading literature, 5 = working in learning group	<input type="checkbox"/>				

1. What parts of this course need to be improved in your opinion?
  
2. What parts of this course were most valuable in your opinion?

Teaching module:	
Professor:	
Semester:	
1. Do you consider your preliminary knowledge sufficient for allowing understanding the programme contents / course contents?	
	Not at all
	A little
	Fairly
	A lot
2. Is the didactic workload appropriate with respect to the credits assigned?	
	Not at all
	A little
	Fairly
	A lot
3. Do you think that the didactic material (suggested and available) is appropriate for the course learning?	
	Not at all
	A little
	Fairly
	A lot
4. Was the examination organized in a clear way?	
	Not at all
	A little
	Fairly
	A lot
5. Was the scheduling of lessons, exercises and other didactic activities respected?	
	Not at all
	A little
	Fairly
	A lot
6. Does your motivation for the course increase following the professor's presentations and lessons?	
	Not at all
	A little
	Fairly
	A lot
7. Did the professor present the matter in a clear way?	
	Not at all
	A little
	Fairly

	A lot
8. Do you think that adjoining didactic activities (exercises, tutorship, laboratories, etc...) were useful for the course learning?	
	Not at all
	A little
	Fairly
	A lot
9. Has the teaching activity been accomplished in accordance with what is declared in the web presentation of the course itself?	
	Not at all
	A little
	Fairly
	A lot
10. Was the professor available for clarifications and explications?	
	Not at all
	A little
	Fairly
	A lot
11. How are you interested in the course contents?	
	Not at all
	A little
	Fairly
	A lot
12. Has the internship satisfied your expectations?	
12 bis. Why?	Not at all
	A little
	Fairly
	A lot
13. To which extent, according to your evaluation, is the internship experience useful for supporting the learning of course's contents?	
	Not at all
	A little
	Fairly
	A lot
14. Suggestions for improving the quality of the course	
	Lighten the overall didactic workload
	Increase didactic support
	Provide beforehand the didactic materials
	Plan intermediate examinations
	Bettering the coordination with other professors/courses
	Other
15. Comments:	

	<open question>
16. Age range	
	20-22
	23-25
	26-29
17. Gender	
	Female
	Male
18. Typology of Study Track	