WP2 Final Report

WP 2
Development of training courses

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1   Introduction

The project FOODQA "Fostering Academia Industry collaboration in Food safety and Quality" has been co-funded under the Erasmus+ Programme. The FoodQA project aims at reinforcing and structuring a Jordanian network for promoting entrepreneurship and innovation in the food area, while improving the flow of knowledge and cooperation between HEI and industry.

FoodQA addressed one of the national priorities in Jordan in providing safe food and food quality. Thus, it responds to the need for a professional and well-designed courses and facilities able to offer answers and provide solutions in the interdisciplinary approach of food industry and business. This integrates knowledge and expertise in academia on one hand and in industry on the other hand. Currently, Jordan regulatory bodies hold massive responsibilities in these fields, but still the lack of integration in between different regulatory and legislative bodies resulted in difficulties in decision making. The development of the FoodQA helped in bridging the gap between of the Jordanian governmental authorities and the industrial community. With the

creation of interface Centres for food safety and food quality in Jordan, FoodQA intends to support the organisation and structure of the interfaces between Academia and Industry; making available to the food sector technical and scientific services that can contribute to the development of the industry and to strength its competitiveness in the direction of a future integration in the European Union in particularly in the area of food safety and quality.

1.1 Objectives

The purpose of WP2 was the development of training courses on different topics in the area of food safety and quality that could be used to upgrade the teachers and trainers of the partner of the FOODQA consortium: This objective will be developed by the following activities:

2.1 Definition of the educational dossiers and content for the 6 training courses.

2.2 Developments of the 6 training courses.

2.3 Validation of the training courses.

2.4 Definition of the model of e-learning courses.

2.5 Definition and validation of content of the e-learning courses.

2.6 Development of the 2 e-learning courses.

2.7 Validation of the 2 e-learning courses.

2.8 installations of the e-library and e-learning.

2   Activities

2.1 Definitions of the educational dossiers and contents for the 8 training courses

Training modules	Contact/teaching hours	TASK/to leader	Contribution to the definition of the contents and of the training materials (M15)	SYLLABUS
1. Food safety hazards	16	**UNITE**	**UNiTE/AUA/UJ/JU/MUTAH/**	**YES**
2. Food safety management systems	32	AUA	**AUA/JFDA/UJ/JU/P&B**	**YES**
3. Personnel Hygiene	4	SPLIT	**SPLIT/JUST/UJ/AUA/JU**	**YES**
4. Design and construction of food *premises*	16	SPLIT	**SPLIT/JUST/UJ/P&B**	**YES**
5. Cleaning and disinfection	16	SPLIT	**SPLIT/JUST/UJ/UNITE**	**YES**
6. Pest control	16	BAU	**BAU/SPLIT/JU/UNITE**	**YES**
7. Quality management systems	32	AUA	**AUA/JUST/MUTAH/CRIT/**	**YES**
8. Quality management tools	40	AUA	**AUA/CRIT/BAU/JFDA/JUST**	**YES**

The FOODQA partners discussed at the kick-off meeting of the project (Feb 2016) the role of the EU partners on the implementation of the training courses for the Jordan partners staff based on the specific expertise of his/her institution.

The discussion focused on:

- the reference EU partner institution

- the Jordan partner Universities contributing to the learning outcomes and their evaluation

- contents

- target group (students:undergrad/grad/professionals…)

- Learning outcomes

 - type: e-learning/in-room

- assessment type

- minimum skill/knowledge requirements.

The list of the leading institution, Jordan partner Universities contributing to the revision for each training package was defined as reported in **Table 1**.

The WP2 leader prepared also a form to be filled in by the reference lead partner of each package containing all the aforementioned information and that was used to prepare the socalled "syllabus" of each training module. The full report of D1.1. is reported in **ANNEXE 1.**

2.2 WP2.2 – Developments of the 8 in-room training courses

At the meeting in Leipzig (Sept 2017) the following decisions were taken in terms of

1.   Planning

2.   Management of the identification of the staff from Jordan institutions for the different trainings

3.   Organisational aspects and responsibility of each training (place, time, duration, any other activity)

4.   Assessment and Evaluation

5.   Certificate

The final results of the activities of this task are reported in D2.2. that is reported in **ANNEXE 2**.

2.3 Validation of the educational dossiers and contents for the 8 in-room training courses-pilot training courses

This Deliverable deals with the validation of the training courses, i.e. the actual organisation aspects, participants, results of the self-assessment end the evaluation (by the trainees) of the overall training.

Based on the contents of the syllabus, P&B organised a 1-week training (32 h) in Porto for the "Food safety management systems"; at Teramo (IT), the University of Teramo (UNITE) organized a 1-week training (overall 32 h) on Food safety hazards and "Cleaning and Disinfection"; in Athens (GR) AUA and CREA.THI.DEV. managed to organized in one week-time (6 days, 40 h) the training on "Quality management systems" and "Quality management tools"; finally the University of Split organised the "Personnel Hygiene", "Design and construction of food premises" and "Pest control" trainings.

Each course adopted various teaching methodologies including face-to-face classes, practical activities and visits in food companies to evaluate practical application examples of the theoretical aspects presented in the classes.

Trainees received paper copies of all training material as well as the e-files where available.

Reports are included in **ANNEXE 3** and the specific training reports in **ANNEXE 3a, 3b, 3c, and 3d.**

2.4 Detailed definition of the model of e-learning courses

The topics of interest for the development of the e-learning materials were defined during the implementation and planning of the FOODQA project proposal based on already evidenced needs to enhance knowledge and competences of academia staff, professionals and practitioners of the food industries on food safety and quality management.

The following main topics were selected:

1. Food safety management systems

2. Quality management systems

3. Personnel Hygiene

During the project meetings held in Porto (Jan 2018) and Amman (April 2018) a Core group team made of the partners with the required expertise was set (JUST, UJ, UNITE, P&B, SPLIT, AUA) and the responsible for each e-learning course identified as follows:

1. P&B: responsible of the "Food safety management systems "

2. AUA : responsible of the "Quality management systems "

3. AUA + SPLIT: responsible of the "Personnel Hygiene "

Each responsible of the e-learning module was asked to develop a specific syllabus of the e-learning course. This document contains all the information of the course needed for the trainee and will be made available

on the e-learning platform. It provides a description of the topics and subjects covered in each module and the learning outcomes expected to achieve on completion, knowledge prerequisites. Each module has to be described for workload time, contact time and reference person.

The syllabus of the three e-learning courses is reported in **ANNEXE 4**.

2.5 Definition and validation of content of the 3 e-learning courses

Each syllabus of the e-learning training course was developed by the reference partner. Each partner, according to the syllabus and the organisation of the module, prepared a series of presentations as Power Point presentations. For each module a series of questions for the self-assessment were asked and added.

1. Food safety management systems (P&B)

2. Quality management systems (AUA)

3. Personnel Hygiene (SPLIT)

Syllabus have been evaluated and validated by the EU partners not involved in the preparation of the e-learning modules and all the Jordan partner universities that were asked to assess their content and give feed-back with recommendations for improvement and request for modifications and revisions made according to the suggestion,. Only after this validation, the contents of the e-learning modules were approved in project management meetings. This procedure assured that the modules could be properly developed as training material that was expected to be uploaded in the dedicated e-learning platform of JUST.

For each module, besides the syllabus, a short CV of the authors of the presentations and a video presentation of the module was also prepared.

2.6 Development of the 3 e-learning courses

Based on the syllabus, each reference partner was asked to prepare teaching and training materials to support the three e-learning courses.

1. Food safety management systems (P&B): 4 ppt presentations

2. Quality management systems (AUA): 4 ppt presentations

3. Personnel Hygiene (SPLIT): 6 ppt presentations

2.7 Validation of the e-learning courses

All the three e-learning modules and corresponding teaching materials developed were validated in this activity. This validation was done by the consortium as a whole in project management meetings. The Academia-industry council was invited to validate these materials.

The final validation of each module was done by all the Jordan partner universities that were involved in pilot training sessions. Each partner countries universities tested at least n. 1 of the e-learning.

All the three e-learning courses were validated in this activity. This validation was done by the consortium in project management meetings. The Academia-industry council was invited to validate these materials.

2.8 Installations of the e-library and e-learning facilities

The FOODQA platform is hosted on the e-Learning Center at JUST. This will guarantee the sustainability of the platform and will provide the needed technical support after the subcontracting services end.

All FSC persons have access to the FOODQA platform and they can manage the registration of their students and monitoring their progress.

The table below shows the status of the platform courses, the times of providing these courses.

N of Course	Name of course	University	n. Students	Semester	Comments
1	GT 400, QMS	JUST	100	Summer 2020	Accredited by the Agriculture Engineering Dep. at JUST as an equivalent course to field training
2	GT 400,FS	JUST	100	Summer 2020	Accredited by the Agriculture Engineering Dep. at JUST as an equivalent course to the field training
3	CHE490, QMS	JUST	10	Spring 2020	Accredited by the Chemical Engineering Dep. At JUST, as an equivalent course to the Engineering Training.

4	Personnel hygiene course_2019_2020_1/2	JUST	23	Winter 2019/2020	Has been delivered for 3 students batches each one at least 18 and the maximum 28 times
5	Quality Management Systems_2019_2020_1	JUST	19	Winter 2019/2020	Is the same as the quality management system course but for different student batch
6	Quality Management Systems_2019_2020_2	JUST	28	Winter 2019/2020	Is the same as the quality management system course but for different student batch
7	Food Safety Management Systems_2019_2020_1/2	JUST	30	Winter 2019/2020	Has been delivered for 3 students batches each one at least 18 and the maximum 28 times
8	Quality Management Systems, FQ103	JUST	41	Spring 2019	The first batch ever by all Jo universities
9	PRODUCT DEVELOPMENT COMPETITION "TRADITIONAL FUNCTIONAL FOODS	All JO HEIs	463	Summer to Winter 2019/2020	All users here are available to access the courses they want, the students who applied for the Project Competition
10	Personnel hygiene Course-BAU_2019_2020_1	BAU	62	Spring 2019 Spring 2020	The course delivered two times
11	Quality Management Systems-BАU	BAU	77	Spring 2019 Winter 2019/20 10 Spring 2020	The course delivered three times
12	Food Safety Management Systems-BAU	BAU	67	Spring 2020 Winter 2019/2020	The course delivered two times
13	Food Safety Management Systems -UOJ	UJ	70	Spring 2020	delivered during the accredited course provided by the agriculture faculty

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14	Personnel hygiene course-UOJ	UJ	85	Spring 2019 Spring 2020	delivered 2 times
15	Quality Management System-UoJ	UJ	85	Spring 2019 Spring 2020	delivered 2 times
16	Quality Management Systems(JU)	JU	19	Spring 2019	
17	Food Safety Management Systems (JU)	JU	20	Spring 2019 Spring 2020	delivered 2 times
18	Personnel hygiene Course-MU	MU	12	Spring 2019	
19	Food Safety Management Systems-MU	MU	6	Spring 2019	
Total by all universities (each time the course delivered for)			1317		

3   Overall Conclusions

All the proposed training courses were successfully designed, developed, validated and tested. The objectives of this work-package can be successfully achieved not only because all the proposed courses were developed but, also because they were produced with a high-quality standard.

This was recognised by all the partners that attended the training modules at the EU partner institutions and did the training by using the e-files of the e-learning modules.

The e-learning courses implementation required an additional effort and a dedicated training session at the Amman meeting in April 2019 was made, providing some specific information regarding the materials to be used (e.g. animations, ppt, videos) the concepts of the synchronous and asynchronous teaching and the structuring of Units along with the corresponding Learning outcomes.

The consortium was also able to gather the human resources to design and develop all the expected deliverables of this WP.