

**Meeting title: Durres meeting on 598444-EPP-1-2018-1-HR-EPPKA2-CBHE-JP project "**  
**Harmonization and Innovation in PhD Study Programs for Plant Health in Sustainable Agriculture –**  
**HarISA "**

<b>Meeting:</b>	<b>Work package 3 (DEVELOPMENT-Improving the scientific content)</b>
<b>Date of Meeting:</b>	29 <sup>th</sup> and 30 <sup>th</sup> March, 2022
<b>Minutes Prepared By:</b>	Ivana Majić and Aleksandra Ignjatović Čupina

## 1. Purpose of Meeting

- Identifying the missing issues and gaps in the course syllabus
- Presentation of the teaching material data base, discussion on the future activities- administration of the database
- Discussion and comparison of the information provided in the course syllabus and information requested by local partners - identify what has to be done and finalize the course descriptions
- Organizational issues of the conference in Novi Sad

## 2. Agenda

1. Acceptance of the Minutes of the 5<sup>th</sup> WP3 Meeting , 19<sup>th</sup> January, 2021 and appointment of Minute taker Secretary for the 6<sup>th</sup> WP3 meeting
2. Improving the scientific contents
  - 2.1. Development of course syllabus (tasks/outcomes 3.2; 3.3; 3.4 ): *Identifying the missing issues and gaps in the course syllabus; Book of teachers (CVs) WP3: 29/03/2022, 9:30-10:30, 11:00-12:00; WP2+WP3: 15:00-16:30; 30/03/2022 WP2+WP3: 11:30-13:30*
  - 2.2. Providing and uploading materials to the web page (task/outcome 3.5): *Presentation of the teaching material data base, discussion on the future activities- administration of the database - 29/03/2022, WP3: 12:00-13:30*
3. Scientific conference organization (task/outcomes 3.6): Preparation of the conference in Novi Sad, 30/03/2022, WP3: 8:00-10:00

## 3. Meeting Notes, Decisions, Issues

1. The meeting was opened and chaired according to the schedule by WP3 leader. Aleksandra Ignjatović Čupina (AIĆ) started with the appointments of the minute-taker secretary, acceptance of the minutes of the 5<sup>th</sup> WP3 meeting, 19<sup>th</sup> January 2021, and invitation to sign the attendance list.

Ivana Majić (FAZOS) was unanimously appointed as Minute-taker Secretary of the WP3 meeting.

The Agenda of the 6<sup>th</sup> WP3 meetings was presented, discussed and accepted by the participants. In continuation, each task was elaborated.

- 2.1. AIĆ presented the analysis of the collected course syllabuses from the 7 scientific subgroups (SGs). AIĆ proposed that each course could be coordinated by one or two professors. She presented the analysis of all courses, group by group. For some courses, the list of teachers was updated at the site and included in the document containing all courses teachers, sorted by SGs and courses, with e-mail addresses of all SG leaders, Course Leaders, and all other teachers involved in each course. AIĆ kindly asked the course leaders to contact their collaborators/teachers and finalize the course together, ASAP. Three course syllabuses from SG 7 were still missing (1. Principles of Scientific Work in Bio-science; 2. Bio-informatics; and 3. Knowledge and management of research funding systems). The coordinators of the three courses confirmed to develop it ASAP, within two weeks at the latest.

With regard to the template of the course syllabuses, AIĆ raised the following questions for the discussion:

- How many courses (mandatory and elective) should be included in the study program structure?
- What number of ECTS should be allocated to each course (mandatory and elective)?
- How many workload hours (lectures; student's research work, and/or other student's activities) to allocate to each course (mandatory and elective)?

According the previous activities and decisions of WP3, in total 22 different courses were developed within seven scientific groups: SG1-Diagnosis in plant health and IPM (3 courses), SG2-Sustainable use of pesticides (3 courses); SG3-Plant feeders (6 courses), SG4-Plant pathology (1 course), SG5-Weed science (3 course), SG6-Mycotoxins and food safety (1 course) and SG7- General contents of transversal interest (5 courses).

Among those 22 courses AIĆ proposed to select two mandatory courses from SG7: Principles of Scientific Work in Bio-science and Bio-informatics. Matteo Spagnuolo (UNIBA) and Maja Šćepanović (FAZ) proposed to include in the list of mandatory courses one additional course based on student preferences, that would be given by a student supervisor teacher/teachers. Discussion was opened, and all participants agreed that the list of mandatory courses will consist of three courses, all of them belonging to SG7: 1. Principles of Scientific Work in Bio-science (course code: PSWB); 2. Bio-informatics (course code: BINF); and 3. Knowledge and management of research funding systems (course code: KMRFS), while all other courses (from SG1-SG6, and two remaining courses from SG7) will be elective. Particular courses given by student` supervisor/supervisors remain in the list of elective courses but the students should be advised to chose it.

Regarding the calculation of the number of ECTS to allocate to each course, AIĆ suggested solutions to the raised questions by referring to WP2 document: *Regulation of International Joint PhD program in PHiSA, Art. 9.*, where the range of a minimum of 28 ECTS and a maximum of 60 ECTS allocated to teaching activities was suggested, and a minimum of 120 and maximum of 152 ECTS for research activities, giving the total sum equal to 180 ECTS for the PhD study curriculum. Furthermore, regarding the teaching activities, a total sum of 8 ECTS to 10 ECTS for mandatory courses was suggested, and the total sum of 20 ECTS to 50 ECTS for elective courses.

After constructive discussion with meeting participants, it was decided to define the number of ECTS, as given in **Tab. 1**. Additionally, regarding the ECTS quantification of research activities, the suggestion of Enrico de Lillo (UNIBA) to assign 5 ECTS to 10 ECTS for additional student activities (e.g. active participation to training courses, workshops, conferences etc) was also accepted.

**Table 1. Allocation of ECTS depending on the type of activity**

TYPE OF ACTIVITY	ECTS IN TOTAL		
Teaching	min. 25	Mandatory general topics (SG7)	10 ECTS
		Elective courses	min 15 ECTS
Research	max. 155	Active participation to conferences, trainings etc.	5-10 ECTS
<b>TOTAL</b>	<b>180</b>		

Regarding the number of ECTS and related workload hours to define for each particular course, with respect to the principal rules (1ECTS equals to 25 hours of active work; 1 semester duration of 15 weeks), the related number of lectures and other students` activities for the range from 3 ECTS to 6 ECTS were calculated and the options presented, as given in **Tab.2**. The decision on the number of ECTS and corresponding workload hours should be done by the teachers of each particular course, taking in account the course contents. For instance, the courses that consist of wide and complex contents or that are multidisciplinary (e.g. Molecular Plant Microbe Interactions, SG4), the appropriate number of credits could be 5, while in other courses the number of ECTS should be 3 or 4.

**Table 2. Workload hours and ECTS provisional calculation**

ECTS	Hours	Lectures h	Other activities h	Mean workload hours / week
3	75	20	55	5
4	100	30	70	6.67
5	125	40	85	8.33
6	150	50	100	10.00

1 ECTS= 25 hours of active work

1 semester =15 weeks



After the discussion, it was decided to allocate 3-4 ECTS for mandatory courses of the joint PhD study curriculum and 3-5 ECTS for elective courses, as specified in **Tab. 3**. Therefore, to courses Principles of Scientific Work in Bio-science, Bio-informatics, and Knowledge and management of research funding systems, 3ECTS, 3ECTS and 4 ECTS were allocated, respectively. For all other courses (19 elective courses) the options to allocate 3 ECTS to 5 ECTS was agreed. All agreed on the proposed options.

**Table 3. ECTS workload breakdown for mandatory and elective courses**

Courses		ECTS	Workload Lectures h +Other activities
Mandatory (3 courses)	1. Principles of Scientific Work in Bio-science	3	20+55=75
	2. Bio-informatics	3	20+55=75
	3. Knowledge and management of research funding systems	4	30+70=100
Elective	Other courses - option a)	3	20+55=75 (L=26.6%)
	- option b)	4	30+70=100 (L=30%)
	- option c)*	5	40+85=125 (L=32%)

In continuation of the discussion regarding course syllabus composition, AIĆ gave instructions and suggestions how to fill the remaining requested parts of the template.

Regarding *Specific entry requirements* it was decided that for all courses included in the curriculum there will be no specific requirements. In order to avoid overlapping of the contents of two parts of the template, *Aims of the course* and *Student's competences*, it was decided to integrate the two parts into a single part entitled *Aim of the course and student's competences*.

So far as it concern the *Teaching methods*, AIĆ proposed that this part of the syllabus could contain the following methods: PPT presentations, other didactic tools, demonstrations in field and laboratory, seminars/round tables/workshops, that could be applied in all of the courses or it can be modified up to teachers' preferences.

Regarding the *Evaluation*, which consists of pre-exam obligations (e.g. Activity during lectures, Practical classes, Colloquium, Seminar papers) and Final exam (e.g. written exam, oral exam) AIĆ proposed, it was discussed and agreed to keep the same distribution of points for all courses (if possible) as follows: 15 points for Activity during lessons, 15 points for practical classes, 30 for seminar papers, and 20 points for both written and oral exam (in total 100 points). Anyhow, if some teachers find that this distribution model is not adequate for their course, they may adjust it.

Finally, for the part of the course syllabus template entitled *A way to form a final grade*, it was proposed to specify the quantification of points by defining the minimum of points required for both written and oral exams (e.g. Final grade is formed based on the sum of acquired points, with the minimum of 11/20 required points for both written and oral exam).

Appointed course leaders together with other teachers involved in each course were requested to finalize the course syllabus template and provide the final version to WP3 leaders until the end of April 2022.

In continuation of the meeting, AIĆ presented and explained how to fill appropriately the template for the Book of teachers (CVs of teachers). The deadline for sending the completed form of the Book of teacher to WP3 leaders was set till the end of April 2022. All participants agreed on the proposed deadline.

**2.2.** AIĆ showed the progress with regard to uploaded teaching and learning materials on the platform entitled *Learning materials for HarISA project* (<https://www.harisa-materials.eu/>) and gave basic instructions on selection, sorting and submitting available materials.

She presented the database with already submitted materials (examples for particular SGs and related courses, with different types of materials). In addition, AIĆ presented the state on the number of submitted materials per each SG, each course and material types. Summarizing table on the number of provided materials was also presented, as

given in **Table 4**. So far, 76 different materials are present in the platform, but for some SGs and courses any material hasn't yet been provided.

**Table 4. Teaching materials currently provided to the platform *Learning materials for HarISA project***

Scientific groups	Number of courses	Type of materials		
		1. Protocols, guidelines, methods	2. Books	3. Dissertations
SG1	3	16	4	-
SG2	3	13	2	-
SG3	6	12	1	2
SG4	1	-	-	-
SG5	3	14	10	2
SG6	1	-	-	-
SG7	5	-	-	-
Total (SG1-SG7)	22	55	17	4

AIĆ emphasized that providing adequate materials should be a continual duty, and it will be enabled during the project lifetime but also later on. Both teachers and students were encouraged to upload materials to the web platform, especially teachers of those courses who haven't yet provided any material. All of them agreed to upload the materials ASAP.

3. Regarding the organization of the Scientific conference, which also represents the duty of WP3, several aspects were discussed and related decisions were made, as follows:

- Title of the event: The proposal of AIĆ to entitle the scientific conference "*Plant Health in Sustainable Agriculture: Hot Spots and Solution Perspectives*" was unanimously accepted.
- Conference venue and date: The conference will be held at the Faculty of Agriculture, University of Novi Sad, Serbia. The hosting institution (UNS) possesses all facilities for conference organization. The proposed date of the venue was defined from 6-8<sup>th</sup> of September 2022. As indicated by Project Coordinator Renata Bažok, the eligible mobility period for this event will be from 5<sup>th</sup> -9<sup>th</sup> of September 2022 for participants travelling from abroad.
- Program of the conference: The conference program will be conceived by three major parts: 1) Final results of the project will be related to the presentation of particular results of the project "Harmonization and Innovation in PhD Study Programs for Plant Health in Sustainable Agriculture –HarISA" (presentations will be given by Project Coordinator, WP leaders and stakeholders). 2) Scientific part of the conference will be devoted to students' research results conducted with the support of teachers during the production of PhD thesis and/or mobility at other PIs. 3) Round table on Students' mobility experiences will be organized in order to exchange experiences on conducted mobilities within HarISA project (usefulness of gained research results, relationship with teachers and staff of the hosting institution, future perspectives for cooperation and collaboration, social aspects etc). Round table could also include discussion on employment perspectives, with participation of stakeholders and other interested participants.

Regarding the scientific part of the conference, it was decided that the program will assume the following proposed sessions:

- Diagnosis in plant health and IPM
- Sustainable use of pesticides
- Plant feeders
- Plant Pathology
- Weed science
- Mycotoxins and food safety
- Bio-diversity and bio-indicators in sustainable agriculture
- Precision agriculture in control of plant pests, pathogens and weeds

It was agreed that the final titles of sessions will be composed after the submissions of abstracts.

- **Participants:** The call for participation will be open for PhD students (including those who defended the doctoral thesis during the project lifetime and those who conducted mobility to project PIs), teachers from project PI-s. Project stakeholders and external scientist are also welcome to participate but their costs will not be covered by the project funds. PI representatives were asked to provide the information about number of participating students until April 15th 2022.
- **Type of participation:** face-to face presentation (oral and poster presentation) and online. Taking in account the higher number of interested participants that could arise in relation to eligible number of participants for each PI, it was agreed to enable also online mode of presentation. It was agreed that the official conference language will be English.
- **Conference boards.** AIĆ gave suggestions on the composition of the Organizing Committee and Scientific Board.

The appointment of Aleksandra Konjević, Local leader of UNS was suggested as President of the Organizing Committee; The following members of the Organizing Committee were suggested: the Project Coordinator (Renata Bažok), legal representatives of UNS-Faculty of Agriculture, Director of the Department of Environmental and Plant Protection (Bojan Konstantinović), one stakeholder representative (Goran Aleksić, President of the Plant Protection Society of Serbia) and other staff from the hosting institution (several teachers and students from UNS). The Organizing Committee is in-charged for all activities related to organization of the conference (before and during the conference) and providing the necessary facilities for the event.

Renata Bažok, Project Coordinator was suggested as President of the Scientific Board. It was also suggested to appoint as members of the Scientific Board the following: WP3 leaders and SG leaders (2+7), representatives of each PI (12 PI leaders) plus one team member/PI (up to 12), with balance among scientific fields. In addition, Enrico de Lillo, suggested to pay attention to the competences of the Scientific board members in order to cover all scientific disciplines. Duties of the Scientific Board are related to review the submitted abstracts, sort them according the topics and organize the related sessions.

The proposed structure of both Organizing Committee and Scientific Board was unanimously accepted. Personal appointments of other members of the Organizing committee will be suggested by President of the Organizing Committee, while each PI Leader will delegate their representatives for membership in the Scientific Board.

- **Conference Material:** Taking in account that there are no project funds eligible for production of conference materials, it was decided to produce the Book of Abstracts which will be exposed on the HarISA project web page.
- **Conference announcements and deadlines:**

The suggested deadline for delivery of the First Announcement was stated: before May 1<sup>st</sup> 2022.

The suggested deadline for abstract submission is end of June 2022. In order to enhance the registration of participants and abstract submission Iva Dobrinčić will prepare appropriate Google forms and send the instructions.

The Second Announcement with program of the conference and other useful information will be delivered later on.

- Matteo Spagnuolo (UNIBA) proposed to include a short field trip in the program of the conference. AIĆ commented that such additional activity would be useful for participants of the conference and if the hosting institution (UNS) will get support funds by any authority the Organizing Committee will make additional efforts to organize a field trip near Novi Sad.

NOTE: Detailed overview of WP3 meeting results of are given apart in form of ppt presentation (WP3 Durres presentation) and word documents (List of courses and appointed teachers, Template Book of Teachers, Template Course syllabus), prepared by WP3 leaders along with the present Minutes document represent integral part of the meeting report of WP3. The Attendance list is given apart.

#### 4. Final conclusions

Members of WP3 successfully conducted the main tasks planned for the HarISA project meeting in Durres. Number of mandatory and elective courses was decided, and suggested ECTS workload breakdown was accepted by all. Each Course Leader should contact other teachers involved in the course and submit finalized course syllabus (according the final version of the template) until the end of April.





Each teacher should finalize and send the CV (Book of teachers) to the WP3 leaders by the end of April.  
Teaching and learning materials should be uploaded for the courses where the materials are still missing.  
Decisions required for starting the activities in organization of the Scientific Conference were done.  
During the 6<sup>th</sup> WP3 meeting, each presentation was followed by productive discussion. WP3 Leaders strongly suggested continuing accurately all of the activities defined within the SG action plans in the next future.

The meeting was concluded on 30/03/2022 at 13.45 h.

WP3 Leaders

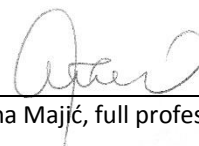


Aleksandra Ignjatović Čupina, Associate Professor



Eustachio Tarasco, Associate Professor

Minute-taker Secretary:



Ivana Majić, full professor