

Strengthening Teaching Competences in Higher Education in Natural and Mathematical Sciences



WORKING PLAN

In the coming period, work on the implementation of the remaining activities within the work package WP2 will await us.

WP2 – Upgrading educational infrastructure at the PC HEIs,

The beginning of the work on the realisation of activities within the work packages

- WP3 Professional development of teaching staff
- WP4 The formation of online learning environment,

are in front of us, too.

Within the work package WP2, after the equipment purchasing and webinars given by colleagues from Granada, Gent, Oviedo i Banska Bystrica, we must continue the activities on

- 2.2. Preparing material for PPM training courses i
- 2.4. Preparing guidelines for the technological enhancement of teaching and learning.

These two activities are closely related to the implementation of appropriate activities within WP3 and WP4. Namely, the activity 2.2 consists of the basis for

- 3.2. PPM training of teaching staff,
- while 2.4 is the basis for the activity
 - 3.3. Training of teaching staff for using new educational technologies,
 - 4.1. The integration of online technologies into traditional courses,
 - 4.2. Developing systems for electronic testing i
 - 4.3. Forming online labs.

Hence, the implementation of all these activities should be planned together.

Activities 2.2 and 3.2:

It is necessary that everyone who wants to participate in the implementation of these activities proposes topics that would be covered in the pedagogical-psychological-methodological (PPM) training courses, as well as topics that would be covered in the teaching material for these courses, which will be prepared in electronic form and printed in the form of a manual.

Our opininion is that the training material does not have to include absolutely all the topics that would be covered in the training courses.

Activities 2.4 and 3.3:



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Within the activity **2.4** guidelines for wider integration ICT in teaching and learning are needed to be prepared. It is planned that this material be used within the framework of the implementation of activities **4.1-4.3**, and a part of the material would be used as teaching material for the training courses related to use of new technologies in teaching and learning, which will be implemented within the framework of activity 3.3. This material will also be prepared in electronic form and printed in the form of a user manual.

Therefore, it is necessary that everyone who wants to participate in the implementation of these activities proposes topics that would be covered in the training courses for the use of modern technologies in T&L, as well as the topics that will be included in the guidelines for the wider integration of ICT in higher education, within the activities **4.1–4.3**.

In accordance with the topics proposed within the activities 2.2, 2.4, 3.2 i 3.3, the multidisciplinary teams for the preparation of training materials and guidelines will be formed.

Activities 4.1, 4.2 and 4.3:

Within the activity **4.1**, it is planned to launch pilot projects for the integration of online technologies into a numerous of traditional courses. The role of these pilot projects is to demonstrate the benefits of usage of online technologies in teaching and learning and to encourage a wider circle of teachers and associates to use these technologies themselves. In order to emphasize the great diversity of models for the use of modern technologies in teaching and learning, it is necessary to offer several different scenarios for the integration of online technologies into courses.

It is planned to form a team that will analyze the specific needs of courses and teachers and propose suitable online learning platforms that will be used as a basis for designing new technologically improved courses.

It is necessary that everyone who wants to participate in the implementation of this activity submits the names of courses which would be innovated in this way.

Within the activity **4.2**, the development of a system for electronic testing, i.e., the adaptation of some existing systems to the specific needs of our courses is planned. A team of experts, in cooperation with teachers who are interested in the introduction of electronic testing systems, will propose appropriate methodological and software solutions, and oversee the creation of these systems.

Here is necessary, too, for everyone who wants to participate in the implementation of this activity to submit the names of the courses within which he intends to introduce electronic testing.

As a part of activity **4.3**, it is planned to launch pilot projects for the integration of online technologies in some laboratories. A team composed of IT experts and teachers who intend to integrate online



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technologies into their laboratories will analyze the specific needs and capabilities of these laboratories and propose appropriate methodological, hardware and software solutions and monitor the implementation of pilot projects.

It is necessary that everyone who wants to integrate online technologies in the laboratory submits the name of that laboratory and the courses for which laboratory exercises would be realized in that laboratory.