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# **Development of practically-oriented student-centred education in the field of modelling of Cyber-Physical Systems – CybPhys**

**609557-EPP-1-2019-1-LV-EPPKA2-CBHE-JP – ERASMUS+ CBHE**

**MC and WS meeting  
December 17<sup>th</sup> 2021**

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Project coordinator  
Riga Technical University**

## **Agenda:**

- 1) Methods of the feedback on courses testing and reporting
- 2) A new version of dissemination and exploitation plan.

# Project progress

- Extraordinary Financial report submitted on November 4<sup>th</sup> is accepted!
  - EACEA has paid 2<sup>nd</sup> advance
  - Request for advance payment is proceeded to RTU Bookkeeping Department
- EACEA still have not confirmed neither budget, neither responsibilities of the partners, neither schedule of the travels.
- Today we will send by e-mail invitations to the:
  - Training School for students and January 17-28<sup>th</sup>
  - invitation for the MC meeting and WS January 27-28<sup>th</sup>
- A request for advances for the partners has been sent to Bookkeeping Department of RTU

**Method of new curricula testing with feedback**  
from teaching staff, students, students organizations  
and entrepreneurs (professional associations,  
enterprises, etc.) involved in student teaching and  
curricula enhancement

*(covered 2.8 and D5.5 of the QAP)*

# The goal of the courses testing

- According to Log Frame Matrix (LFM) Partners reports with lists of the students studying in the modernized study programs
- Partners reports with a feedback from:
  - students by courses
  - academic/teacher staff involved in teaching of students by courses
  - students organizations
- The measurement of indicators according to the LFM are:
  - the number of validated / tested during one-year master-level courses
  - The number of students toughed
- Testing to be held twice: related an Autumn of 2021 and Spring 2022 semesters
- Partners reports on curricular testing with feedback from teaching staff, students and experts from professional associations, enterprises and scientific research institutions involved in teaching of students, curricular modernization and reviewing.
- Testing reports: January 15<sup>th</sup>, June 15<sup>th</sup> ?? Or January 30<sup>th</sup> and June 30<sup>th</sup>?

# Training Evaluation Sheet for Students

No	Criterion (Критерій)	Strongly disagree	Partially disagree	Neutral assessment	Partially agree	Strongly agree
1	All study program themes required to achieve the defined learning outcomes were covered <i>Всі теми навчальної програми дозволяли досягти мети курсу, що вивчається</i>					
2	The course was well-structured and the themes were explained in a comprehensible manner <i>Курс був добре структурованим і теми були пояснені у доступній формі</i>					
3	The logical structure of the lecture was maintained <i>Логічна структура лекцій витримана</i>					
4	Audio-visual materials were efficiently used during the lecture <i>Ефективно використовувалися аудіо-візуальні матеріали під час лекцій</i>					
5	Creative thinking was efficiently promoted <i>Ефективно розвивалося критичне мислення</i>					
6	Practical application of theory was efficiently promoted <i>Ефективно розвивалося практичне застосування теорії</i>					
7	During the class the amount of theoretical material and practical tasks was balanced <i>Під час занять кількість теоретичного матеріалу та практичних завдань було збалансовано</i>					
8	Recommended literature sources were accessible and helped in acquiring the course materials <i>Рекомендовані літературні джерела були доступні та допомагали оволодінню навчальними матеріалами</i>					
9	The lecturer/professor's attitude to the students was positive and helpful <i>Ставлення лектора/професора до студентів було позитивним та доброзичливим.</i>					
10	The time for the completing of the practical tasks was enough <i>Часу на виконання практичних завдань було достатньо</i>					

What did you like in the course?

Чим вам сподобався цей курс?

Outline 3 points you would like to take with you/have learnt in this class

Виділіть найбільш значущі з Вашого погляду знання, які Ви придбали на цих заняттях

Do you have any suggestions for further improvement of the course? (If so, please give details and if you would like to be contacted about this idea please include your email address)

Чи є у вас якісь пропозиції щодо подальшого вдосконалення курсу? (Якщо так, то прохання уточнити, і якщо ви хочете, щоб з Вами зв'язалися з цього питання, будь ласка, вкажіть адресу своєї електронної пошти)

-----  
**If you do not mind, please could you give us some additional more information about yourself**

**Gender:** Male/Female/Prefer not to specify

**Age:** 16-21      22-30      31-40      41-50      51-60      61+

**Status:** Home Student                      EU Student                      International Student

# Consolidated for students

## Report

on the Spring semester testing of courses and laboratory practices  
in the framework of the project «PHYSICS» program ERASMUS+ EU

Date of testing: 18.04-25.06.2018

How many questionnaire forms have been proceeded: 31

How many questionnaire forms were found valid: 31

Course title	Degree of course (bachelor, master)	Testing results				
		Strongly disagree %	Partially disagree %	Neutral assessment %	Partially agree %	Strongly agree %
Nonlinear Optics	4-year course	1.6	0.4	9.1	22.7	66.1
Semiconducting devices (lab. practice)	4-year course	0	6.5	11.7	39	41.6
Integrated Environment for Engineering Computing (lab. practice)	4-year course	4.2	8.3	13.4	29.1	44.5

### Statistics on the answers given on the course (in percentage).

Comments and conclusions for BSU students questioning about testing results by 1<sup>st</sup> and 2<sup>nd</sup> items with free answers in Annex 1 (feed-back testing sheets):

Question 1. Most master students noted that the lectures were interesting and relevant. Modern teaching methods were used: presentations, video. Some of them admitted friendly atmosphere during the lecture courses.

Question 2. We received a large amount of information on the subjects studied and mastered the skills to work with modern software for physical processes simulation as well. We also learned about nanomaterials and nanotechnologies.

Question 3. Most mater students noted the necessity for getting more audio and video materials to increase the efficiency of self-study.



# Training Evaluation Sheet for teachers

## Questionnaire for staff

Title of training course: \_\_\_\_\_

Level of training course (Bachelor, Master, Course  
year): \_\_\_\_\_

Date: \_\_\_\_\_

Name of Trainer(s): \_\_\_\_\_

Room: \_\_\_\_\_

Full number of students registered for the course				
Evaluation of average attendance of the lectures (%)				
Evaluation of average attendance of the classes, (%)	Lect	Pract	Lab	
		-	-	
The number of students who have ultimate control assessment (the exam)	High (9-10)	Average (6-8)	Low (4-5)	Failed (< 4)
The proportion of tasks (in %) of all included in the course, aimed at:				
pure application of knowledge	development of critical thinking, causal-investigatory analysis, development of practical experience and skills		development of new competence, independent thinking, the ability to non-standard approaches in solving problems and making decisions	
The proportion of students who have completed these tasks with the highest rating (in %)				
pure application of knowledge	development of critical thinking, causal-investigatory analysis, development of practical experience and skills		development of new competence, independent thinking, the ability to non-standard approaches in solving problems and making decisions	

1.What is, how do you think, the importance of this course?

1.Point out a few basic things that you consider most important in mastering this course?

2.Do you have any suggestions for further improvement of the course? (If so, please give details and if you would like to be contacted about this idea please include your email address)

-----  
**If you do not mind, please could you give us some additional information about yourself?**

**Status:** assistant/ lecturer/ assistant professor/ professor

**Teaching experience:** just started/ 3-7years/ 7-15years/ 15-20years/ >20years/

\_\_\_\_\_ Signature

**Questionnaire for staff**

Title of training course: Computer simulation  
 Level of training course (Bachelor, Master, Course year): Master  
 Date: 12.01.2018  
 Name of Trainer(s): Girgel SS  
 Room: 2-10  
 Faculty: Physics and IT

Full number of students registered for the course	27			
Evaluation of average attendance of the lectures (%)	80%			
Evaluation of average attendance of the classes, (%)	Lect 70%	Pract 100%	Lab .	
The number of students with intermediate control assessment on laboratory and practical exercises	High (9-10) 3	Average (6-8) 17	Low (4-5) 7	Failed (<4) —
The number of students who have ultimate control assessment (the exam)	High (9-10) 3	Average (6-8) 18	Low (4-5) 6	Failed (<4) —
The proportion of tasks (in %) of all included in the course, aimed at:				
pure application of knowledge	development of critical thinking, causal-investigatory analysis, development of practical experience and skills		development of new competences, independent thinking, the ability to non-standard approaches in solving problems and making decisions	
5	18		10	
The proportion of students who have completed these tasks with the highest rating (in %)				
pure application of knowledge	development of critical thinking, causal-investigatory analysis, development of practical experience and skills		development of new competences, independent thinking, the ability to non-standard approaches in solving problems and making decisions	
100%	80%		75%	

1. What is, how do you think, the importance of this course?
2. Point out a few basic things that you consider most important in mastering this course?
3. Do you have any suggestions for further improvement of the course? (If so, please give details and if you would like to be contacted about this idea please include your email address)

If you do not mind, please could you give us some additional information about yourself?

Status: assistant/ lecturer/ assistant professor/ professor

Teaching experience: just started/ 3-7years/ 7-15years/ 15-20years/ >20years

 Signature

# Testing of students organization representatives

- The same questionnaire as for students
- The similar consolidation reporting form

# Report on new curricular testing with feedback from stakeholders

(Report 1 of KhNAHU of ..... education year)

## Deliverable No 2.8

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# Schedule for curricular evaluation

## Two reports!

<b>(D2.8)</b>	Partner' <b>Reports on new curricula testing</b> with feedback from teaching staff, students, student' organisations and entrepreneurs (professional associations, enterprises, etc.) involved in student teaching and curricula enhancement (covered also by D5.5)	15.01.22 ? /30.01.22 14.06.22. ? 30.06.22 <b>New dates have been confirmed</b>
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**WP6: Dissemination of results.  
Dissemination and Exploitation plan.  
Progress**



CyBPHYS Dissemination and Exploitation Plan\_Draft\_15.12.21.docx (Режим ограниченной функциональности) - Word (Сбой активации продукта)

	Author	activity	website, etc
07/09/19	KNU,	News about	<a href="https://www.facebook.com/knu.edu.ua">https://www.facebook.com/knu.edu.ua</a>
09/12/19	Mykola	CybPhys events	
12/03/20	Stupnik,	(zoom	
03/08/20	Liydmila	meetings,	
07/09/20	Kruhlenko,	Python	<a href="https://www.facebook.com/groups/1414976482086783">https://www.facebook.com/groups/1414976482086783</a>
05/10/20	Natalia	workshops,	
29/10/20	Morkun,	English	
30/10/20	Iryna	language	
10/11/20	Zavsiehdashnia	workshops) on	
15/12/20		FB pages of	<a href="https://www.facebook.com/aknt.knu">https://www.facebook.com/aknt.knu</a>
18/01/21		- KNU;	
03/02/21		International	
09/02/21		Relations	
25/02/21		Department of	
11/03/21		KNU;	
21/03/21		Automation,	
		Computer	
		Science and	
		Technologies	
		Department	
		KNU	
Since Dec 2019	KNU	Current	<a href="http://doir.knu.edu.ua/%d0%bf%d1%80%d0%be%d0%b5%d0%ba%d1%82%d0%b8/">http://doir.knu.edu.ua/%d0%bf%d1%80%d0%be%d0%b5%d0%ba%d1%82%d0%b8/</a>
	Liydmila	information	
	Kruhlenko	about Erasmus	
		+ projects on	
		KNU Dept of	
		International	
		Relationships	
07/09/20	KNU	Topical news	<a href="https://www.facebook.com/provos/aknt.knu">https://www.facebook.com/provos/aknt.knu</a>
05/10/20	Natalia	about CybPhys	

СТРАНИЦА 5 ИЗ 23 ЧИСЛО СЛОВ 6011 АНГЛИЙСКИЙ (СОЕДИНЕННОЕ КОРОЛЕВСТВО)



**Other questions**