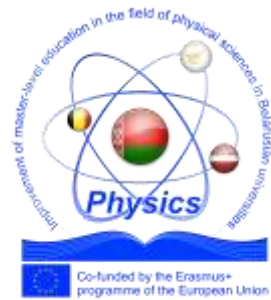




Co-funded by the
Erasmus+ Programme
of the European Union



Improvement of master-level education in the field of physical sciences in Belarusian universities, Acronym: "Physics"

**Management meeting and Workshop 10th on curricula development
September 26th – 27th 2018
University of Cyprus
Anatolijs Zabašta, RTU**

Agenda	Time	Contributor
September 26th		
<i>Registration</i>	<i>9.00</i>	
Welcome University of Cyprus.	9.30	UCY, RTU
Adoption of the agenda. Project progress.	10.15	RTU: A. Zabašta
Reports on new developed courses, teaching materials and study programs and its accreditation in the universities.	10.30	RTU, BSU, GrSU, GoSU and BSTU
Reports on testing of the courses, teaching materials and study programs.	11.00	BSU, GrSU, GoSU and BSTU
<i>Coffee break</i>	<i>11.30</i>	
Implementation of curriculum, Book on Applied Physics (WP 2), final version.	12.00	KU Leuven
Implementation of curriculum, Book on Applied Informatics (WP 2), final version.	12.15	RTU
Implementation of curriculum, Book on Functional Nanomaterials (WP 2), final version.	12.30	BSU
Implementation of curriculum, Book on Photonics (WP 2), final version.	12.45	BSU
Implementation of curriculum, Book on Guidelines on Master Thesis in Applied Physics (WP 2), final version.	13.00	UCY
<i>Lunch</i>	<i>13.15</i>	

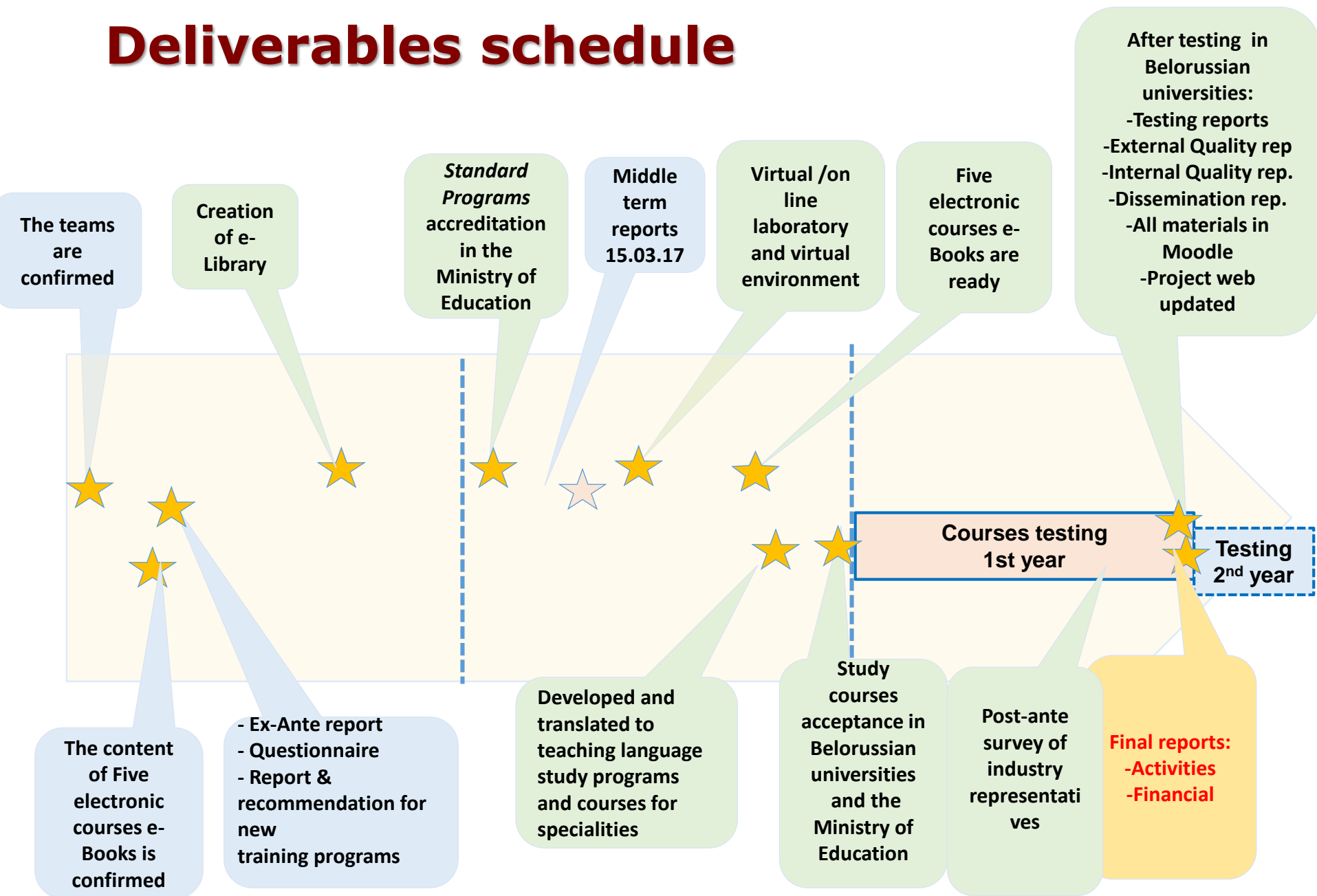
Application of innovative teaching methods & electronic environments (WP3). Progress.	14.30	KU Leuven
Dissemination and Exploitation of results. Dissemination & Exploitation plan (WP5)	14.45	UCY
A feedback from the Final conference for dissemination	15.00	BSTU, RTU, all
Quality assurance issues. <ul style="list-style-type: none"> • Monitoring and evaluation by internal team • Monitoring and evaluation by external expert 	15.15	
Arrangements to the final Technical (activities) report	15.30	RTU, all partners
Project financial aspects and arrangements for the Final Financial reports.	16.00	RTU
Project sustainability's issues. Activities beyond the project.	16.30	
Conclusions, next steps.	17.00	RTU and all partners
<i>The end of the 1st day</i>	<i>18.00</i>	

September 27th

Feedback from the previous day discussions	9.00	All partners
Visit to UCY laboratories and sites	9.30	UCY
Continuing of discussion about curricular (WP2)	11.00	All partners
Issues of common interest. Bilateral meetings.	12.00	All partners
<i>Coffee break</i>	<i>13.00</i>	
The end of the day	14.00	

Project progress

Deliverables schedule



**Reports on new developed courses,
teaching materials and study programs
and its accreditation in the universities.**

Report on testing of the courses, teaching materials and study programs

Grodno SU

Description of the courses tested during the 1st testing year

	Course name	Credit points	Level (Bachelor, Master)	ECTS credit points	Preliminary number of students	Type of delivery (lecture, lab, practical)	Duration of the course (from - till)	Type of control (test, exam)	Background subjects/ preliminary knowledge
Grodno State University	Nanophotonics	3	Master	3	9	Lectures, Labs	1/09/17 – 10/01/18	exam	
Grodno State University	Physical and chemical methods of analysis	3,5	Master	3,5	8	Lectures, Labs	1/02/18 – 30/06/18	exam	
Grodno State University	Optical methods of investigations	1,5	Master	1,5	14	Lectures, Labs	1/02/18 – 30/06/18	test	

Description of the courses tested during the 1st testing year

	Course name	Credit points	Level (Bachelor, Master)	ECTS credit points	Preliminary number of students	Type of delivery (lecture, lab, practical)	Duration of the course (from - till)	Type of control (test, exam)	Background subjects/ preliminary knowledge
Belarusian State Technological University (BSTU)	Theoretical basis of polymer processing	3,0	1-year 1,5-year	4,0	4	Lecture	01.09.17 – 25.01.18	Exam	Chemistry and physics of polymers, Theoretical basis for processing polymers and composites, courses of special disciplines

Gomel SU

Description of the courses tested during the 1st testing year

	Course name	Credit points	Level (Bachelor, Master)	ECTS credit points	Preliminary number of students	Type of delivery (lecture, lab, practical)	Duration of the course (from - till)	Type of control (test, exam)	Background subjects/ preliminary knowledge
Gomel State University	Physics of wave processes	4	2-year master	4	10	2-year master	09.02.18 – 12.04.18	exam	Molecular Physics, Electricity, Quantum Mechanics, Thermodynamics, Fundamentals of material science

Comments to the 2nd version of Testing reports

- Attachments to the Report for [the evidence](#):
- To allocate the reports in <https://dl.bsu.by> (we can see only BSU report).

dl.bsu.by Русский (ru) Мои курсы Цвета темы Этот курс

Участники

Компетенции

Оценки

В начало

Личный кабинет

Календарь

Личные файлы

Мои ресурсы:

Applied Informatics

Applied Physics ch.1-3

Applied Physics ch.4-5

Documentation

Functional nanomaterials

Photonics

Research & management

Report on new curricular testing and accreditation

- Testing BSTU
 - Questionnaires of staff and students (Autumn).pdf
 - Questionnaires of staff and students (Spring).pdf.pdf
 - Testing report_BGTU_Autumn.doc
 - Testing report_BSTU_Spring.doc
- Testing BSU
 - Testing report_BSU-Fedotov2.doc
 - Testing report_BSU-Fedotov5.doc
- Testing GoSU
 - Testing Report GSU.rar
 - Testing report_GSU_(spring 2017-18).doc
 - Testing report_GSU.doc
- Testing GrSU
 - Annex1.docx
 - Annex2.docx
 - Annex3.pdf
 - Annex4.pdf
 - Annex5.PDF
 - Annex6.PDF
 - Annex7.PDF

Electronic books

- The Electronic books are prepared and published in e – library <https://dl.bsu.by/index.php?>
- **Master Thesis Guidelines in Applied Physics Editors: Stella Hadjistassou and Elias Kyriakides**
 - The book is well edited, ISBN - 978-9934-22-101-9 (pdf)
- **Applied Informatics Editors: Leonids Ribickis, Nadezhda Kunicina.**
 - The book is well edited, the last version is uploaded on 26.03.18.
- **"Applied Physics": Editor: Joan Peuteman.**
 - The book is well edited, the final version is uploaded 28.08.18 – submitted to RTU Publishing house for ISBN
- **Functional nanomaterials (curator – BSU)**
- **Photonics (curator – BSU)**

WP2:
Book on Applied Physics

Implementation of curriculum, Book on Applied Informatics

Book on Functional Nanomaterials

Book on Photonics

Book on Guidelines on Master Thesis in Applied Physics

Application of innovative teaching methods & electronic environments (WP3)

Dissemination and Exploitation of results (WP5)

Feedback from the Final conference for dissemination

- Date: September 12th
- 46 participants: all partners, students.
- A representative of Belarusian National ERASMUS+ Contact Center
- Very good presentations!
- Contribution from the students of GrSU and GoSU
- A lot of thanks for organization of the conference to Konstantin, BSTU Vice-rector Andrej Sakovich and other team members!



Management meeting

Final Report

SECTION 1: RELEVANCE

- **For each of the Partner Countries** included in the consortium:
 - a) **List 3 main achievements/results** of your project at institutional, national and/or regional level;
 - b) Explain how the **achievements/results are relevant to the policy area (national and/or regional)**,
- **Please provide information and quantify the inter-institutional agreements or bilateral agreements** signed/to be signed by partner country institutions to promote cooperation in the field of ..
- Describe and justify where and when **equipment items** have been installed and **how they have been used in the project and will be used in the future**;
- 7) **Links with society**
 - Explain how the project helped to strengthen the role of **higher education institutions in society at large**;
- 1) **Involvement of partners and stakeholders**
 - how partners will **continue to cooperate in the future**;

Final Report

3) Sustainability / exploitation of results

- Explain the role, commitment and concrete measures taken by the **partner country beneficiaries** to **guarantee the sustainability** of the project outcomes/results beyond the project's lifetime (**specify the funding sources** if known);
- Explain how you have achieved a **multiplier effect of the project**; how the results have been **exploited beyond the immediate target group** and transferred to other contexts (for example to the wider education system, **local economy and society**, other institutions, other regions, etc.);
- What measures have been taken to formalise or institutionalise **links with local non-university partners**?
- Please explain if any **measures** have been put in place in order **to enlarge the implementation of the project results/outcomes beyond consortium** participants;

Final Report

1) Previous recommendations/follow up

- Explain how the **recommendations** given by the Agency (**in the assessment of the Technical report, in the feedback from monitoring visits, in monitoring exchanges with the Agency, etc.**) have been followed up, addressing each recommendation separately and highlighting steps and measures taken.

В том числе от Белорусского Контактного Пункта (Листонад)

5) Innovation

- If applicable, describe to which extent the project **has proved to be innovative** and how do the project's results offer innovative and creative **solutions** to promote capacity building

Technical report – ES Agency recommendations

- Recommendations and necessary improvements, which are still in progress:
 - A new version of Dissemination plan should be developed. Strategy to engage the labor market and overcome the reluctance towards 4+2 Bologna type degrees – UCY and other partners prepared the Plan and the Report (working versions)
 - Demonstrate complementary with the TEMPUS project – please put in your reports (BSU)
 - To explain the role of associated partners - please put in your reports!
 - To demonstrate project outputs at website – more information is allocated
 - Inter-institutional agreements or bilateral agreements signed/to be signed by partner country institutions to promote cooperation in the field of education and/or research, as a result of cooperation in Erasmus+.

4) Curriculum Development

For each of the courses developed (/updated) provide:

- The title of the course;
- Indicate if it has been updated (i.e. preexisting in the partner country institutions) or totally newly created. In case of updated courses, explain the new elements and estimate the percentage they represent in relation to the preexisting course;
- The course volume (in ECTS);
- The name of the degree/diploma it is part of;
- The link to the university'(/ies') webpage where these courses are listed;
- The teaching/training methodologies developed/adopted (incl. e.g. e-learning/training modalities, practical placements in enterprises, etc.);
- The status of recognition/accreditation in each of the partner country institution concerned.

Univer sity	Course Title	Update d or totally newly created	Level (Bachelor, Master 5-year course)	Volume ECTS credit points	The teaching/training methodologies developed/adopted e.g. e-learning/ training modalities, practical placements in enterprises, etc.	The link to the university' webpage	The status of recognition/ accreditation (by the university or a country institution)
BSU	Comp osite nanost ructur ed materi als	totally new	1-year/ 2-year masters/ 5-year course	2,0		https://.....	

Indicators

• STATISTICS AND INDICATORS

• Training and mobilities

Number of academic staff from the partner country's Higher Education Institutions trained/retrained

Please indicate the number of teaching staff (professors, assistants with teaching tasks, etc.) trained and/or retrained to the date of the report submission

and the percentage this represents as compared to your objectives at the end of the project

Student mobility

Number of partner country – programme country mobility flows of more than 2 weeks

Please indicate the number of partner country student mobility flows from the partner country to the programme country to the date of report submission:

and the percentage this represents as compared to your objectives at the end of the project

	Country Code:	Country Code:	Country Code:	Country Code:	Country Code:
Number Male					
Number Female					
% compared to objectives					

(Country of origin)

	Country Code:	Country Code:	Country Code:	Country Code:	Country Code:
Number Male					
Number Female					
% compared to objectives					

Quality assurance issues

- Monitoring and evaluation by internal team
- Monitoring and evaluation by external expert

Project financial aspects and arrangements for the Final Financial report

Auditor

- RTU will sign an agreement with KPMG Baltics SIA
- KPMG operates as a global network of independent member firms offering audit, tax and advisory services; working closely with clients, helping them to mitigate risks and grasp opportunities.
- The name "KPMG" stands for "Klynveld Peat Marwick Goerdeler."

Equipment

- Compliance with procurement rules:
- Compliance with eligibility of costs:
- **Tendering procedure:**
 - The Rules of tender,
 - Announcement of tender;
 - 3 offers from suppliers,
 - Decision of the Tender committee.
 - Contract with supplier
- **Invoices**
- Bank statements
- Proof that the equipment is recorded in the inventory of the institution

The common errors made by beneficiaries for Equipment

- Invoices are not detailed enough to establish a clear connection to project activities.
- Deductible VAT is included in the invoice and charged as project expenditure;
- Tendering procedure is not applied for the purchase of goods or services exceeding 25.000 EUR;
- Purchase of equipment is split into smaller contracts with individual amounts lower than the 25.000 EUR threshold;
- Proof of expenditure is a **pro-forma invoice**, an offer or a quotation instead of **an invoice**.

Cost calculation - salaries

- **Managers (staff category 1)** (including legislators, senior officials and managers) carry out top managerial activities related to the administration and coordination of project activities.
- **Researchers, teachers and trainers (RTT) (staff category 2)** typically carry out academic activities related to curriculum/training programme development, development and adaptation of teaching/training materials, preparation and teaching of courses or trainings.
- **Technical staff (staff category 3)** (including technicians and associate professionals) carries out technical tasks such as book-keeping, accountancy, translation activities..
- **Administrative staff (staff category 4)** (including office and customer service clerks) carries out administrative tasks such as secretarial duties.

Supporting documents for Financial report

- A formal **employment contract** is required.
- The **Time-sheets** must be signed by the person concerned and countersigned by the person responsible.
- A duly filled in **JOINT DECLARATION** for each person employed by the project
- The **JOINT DECLARATION** must be signed by the person concerned, then signed and stamped by the person responsible (e.g. the dean) in the institution where this person is normally employed.
- For staff performing different categories of tasks a separate **DECLARATION** must be signed for each type of activity.

Instructions for a Auditor – staff cost

For the employees selected, the Auditor checks that they:

- were hired by the beneficiary in accordance with its national legislation;
- were:
 - employed by the Institution and they were part of its payroll system, or;
 - were natural persons assigned to the project on the basis of a contract against payment;
- were performing tasks directly necessary to the achievement of the objectives of the project;

Which documents should the beneficiary prepare for the auditor?

- *Employment contracts* for the staff in question, as well as *standard employment contracts* in use for personnel who perform a variety of work for the beneficiary
- A duly filled-in Joint Declaration
- If the staff member performs tasks corresponding to different categories of staff, a separate Joint Declaration must be signed for each category.
- Time-sheets

Instructions for a Auditor – staff cost

- Any material evidence allowing to verify that the declared workload corresponds to actual activities/outputs
 - attendance lists for lectures given,
 - tangible outputs / products (developed courses, reports etc.)
 - salary slips, etc.

Instructions for a Auditor - Travel cost

- for Travel costs, the distance travel bands have been applied correctly;
- for Costs of Stay, the number of unit costs declared corresponds to the actual number of days of the activities (including the travel).

Which documents should the beneficiary prepare for the auditor?

- Any proof that the journeys actually took place and are connected to specific and clearly identifiable project-related activities.
- A duly filled-in Individual Travel Report
- ***Supporting documentation***

Instructions for a Auditor - Travel cost

- Supporting documentation will have to be attached to each travel report in order to demonstrate the fact that the travel and the activity actually took place
 - travel tickets,
 - boarding passes with points of departure and destination,
 - dates and name of the person travelling,
 - invoices, receipts,
 - proof of attendance in meetings and/or events,
 - agendas,
 - tangible outputs/products, minutes of meetings).

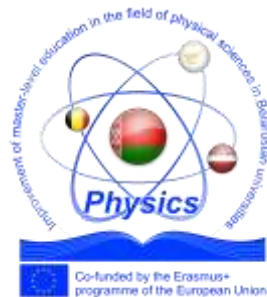
Further tasks and the next steps

Further tasks and the next steps

- Dissemination:
 - Press conferences: each Belarus university devoted to the finish of the project, Press releases
 - Web and E-environment – improvements
 - References to the project and its website!
 - Facebook, YouTube and LinkedIn
 - Publications at the scientific conferences
- Meeting in Riga 8-9th October
- Sustainability:
 - Bilateral agreements
 - All materials to be allocated at <https://dl.bsu.by/> and at websites of the partners
 - 5 e-books in English and Russian. To issue in electronic form with ISBN number
 - Dissemination and Exploitation plan
- **Final reports:**
 - Financial report
 - Technical (activities) report



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Questions?