

PBLMD

PBL INTERDISCIPLINARY AND INTERINSTITUTIONAL PROJECT

Editors

Andreea Bujac and Romeo V. Turcan

www.pblmd.aau.dk



Erasmus+



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PBL Interdisciplinary Project/PBLIP

Project title, ECTS credits PBL Interdisciplinary Project 5 ECTS
Location 4 TH Semester BSc Study Programmes (PBL pilot programs that are part of PBLMD project) AESM, USARB, CSU, MSU, SUMPh, TUM
Project coordinators AESM: Angela SOLCAN, ansolcan@gmail.com USARB: Ina ODINOKAIA, inegura@gmail.com CSU: Liudmila ROSCA-SADURSCHI, liudmila.sadurschi@gmail.com, MSU: Natalia ZAMFIR, nataly.zamfir@yahoo.com SUMPh: Angela CAZACU-STRATU, angela.cazacu@usmf.md TUM: Dumitru CIORBA, dumitru.ciorba@ati.utm.md
Type, theme and language <u>Type:</u> The students will accumulate 5 ECTS by writing group projects and defending them in oral, group examinations <u>Theme:</u> Interdisciplinary Project within the scope of Sustainability Development Goals (see Fig 1) <u>Language</u> of instruction: Romanian
Learning Objectives <u>Knowledge:</u> <ul style="list-style-type: none"> Reflecting on how to create a problem formulation, i.e. substantiate, document and define a problem within the area defined by the theme of the project period Explaining how the chosen problem formulation is relevant within the chosen interdisciplinary subject. <u>Skills:</u> <ul style="list-style-type: none"> Identifying, formulating and analysing a problem which is relevant to the interdisciplinary group Assessing and using the literature relevant to the chosen topic Using the correct method to analyze the problem Reporting problem-based project-work, by connecting the selected problem to theory and methodology Using and addressing sources Disseminating the results of the project work orally and in writing in clear and correct language while adhering to the academic conventions governing source management, documentation,

bibliography and notes

Competences:

- Ability to apply the above knowledge and skills to specific domains and across different situations to generate academic, social, business and/or policy impact
- Solving problems effectively and making decisions as part of a group
- Critically reflecting upon information sources and proposing solutions to the chosen problem

Learning outcomes

Students are expected to have achieved the following outcomes:

- The ability to explore research problems and identify them within the interdisciplinary fields, as part of a group.
- Effective problem-solving and decision-making abilities based on the theories and interpretation tools chosen for the project.
- Cognitive ability for critical thinking, and reflecting on the whole process of PBLIP

Academic content and conjunction with other semesters

Since their enrolment in Sep 2017 in PBLMD pilot programmes (mentioned above), these BSc students have been engaged in PBL, student-centred teaching and learning as well as in PBL training. For example they had the opportunity to take part in project idea generation training as well as in project development training in interdisciplinary groups. Hence, the students are expected to have competences as below from the three previous semesters at their own study programmes. The supervision in PBLIP therefore takes for granted, that the students can work independently and in teams and are using the freedom and the student-centered PBL-approach in full to work with a research based question of his/her/their own choice:

- Cognitive ability for critical thinking, analysis and synthesis. This includes the ability to identify assumptions, evaluate statements on the basis of scientific evidence, detect false logic or reasoning, identify implicit values, define concepts and draw general conclusions in an appropriate manner.
- Effective problem-solving and decision-making abilities based on the use of appropriate qualitative and quantitative skills, including identifying, formulating and solving problems within the field. The ability to create, evaluate and assess a number of options, and the ability to apply ideas and knowledge in situations of uncertainty or limited information.
- The ability to explore research problems within the field, either individually or as part of a group in connection with PBLIP. This requires a critical approach to data, sources and methods.
- A self-reflective, critical and open approach to other people, other cultures and various issues within interdisciplinary fields.

PBLIP organisation and time schedule

This PBL Interdisciplinary Project builds on students' experience taking the students a step further. During this IP the students will work in interdisciplinary teams of 6 (1 student from a partner university), identify, investigate, address and report an interdisciplinary research problem within the scope of Sustainability Development Goals. The following time-table will be followed:

Feb 21-24: forming groups, identifying project research problems/topics, allocating supervisors, preparing for the project, incl., group exam (BSU and CSU students and staff travel to Chisinau)

Feb – Mar: intensive project team work, incl.:

on-line group meetings and supervision

on-line, at least 2, joint supervision meetings with AAU mentors

one group face-to-face meeting per team (BSU and CSU students travel to Chisinau)

Mar 1 – commitment action plan between the groups and supervisor teams & extended Problem Formulation (1 page) (DL: 12pm)

Mar 5 – Approval of PF by supervisors

Mar 8 – Project proposal outline (200 words for each chapter) & Timeline for supervisor

Mar 11-12 – Online supervision meeting + AAU mentors (online)

Mar 22 – Physical/face-to-face Meeting in Chisinau (online: mentors AAU - 19 Mar)

Mar 29 – Online supervision meeting

Apr 5 by 12pm: submission of PBLIP (electronically via Moodle)

Apr 11-14: PBLIP evaluation (BSU and CSU students and staff travel to Chisinau):

Apr 12: Formal group exams: two hours per group; examination team: 2 internal supervisors and AAU mentor

Apr 13: Project competition (informal group assessment): 30 min per group; evaluation panel: 6 CEOs from Entrepreneurial, IT, Law, Medical, Public sectors; there will be prizes for the first three places

Format

Problem formulation: PBLIP is based on a research problem within the scope of Sustainability Development Goals (see Fig 1) of students' **own choice**

Project structure: refer to Appendix 1 for the project structure

Project size: between 5500-6000 words, excluding abstract/executive summary, table of content, references, appendices and self-reflection; Times New Roman, 12 points, double space, A4, 2.5cm all margins, footnotes allowed but keep at minimum, no end-notes

Referencing style: use only Chicago citation and referencing style:

http://www.chicagomanualofstyle.org/tools_citationguide/citation-guide-2.html

Plagiarism: all project submitted electronically via Moodle will be scanned for plagiarism via AAU anti-plagiarism system. Refer to Appendix 2 for anti-plagiarism guide.

Project facilitators/supervisors

Working in teams on PBLIP is an independent student exercise under the supervision of supervisory teams. A supervisory team is comprised of: 2 academic staff members from different local universities as main supervisors and 2 AAU staff mentors as mentors.

The role of supervisors and mentors is one of a facilitator rather than a director: they guide the learning process by asking critical questions and making suggestions that help the teams to re-examine their thoughts and approaches on the problem of investigation, theories employed, methods designed, analysis undertaken, and discussion put forward.

The supervisor's contribution to students' learning process is greatly facilitated when the students present their views clearly, specify concisely the problems and/or challenges they are facing.

Main supervisors:

ASEM: Solcan Angela, ansolcan@gmail.com; Gaugaș Tatiana, t_gaugash@yahoo.com

BSU: Mihaela Cruglișchi, mihaelakruglitki@gmail.com; Mariana Spatari, spatarimariana@mail.ru

CSU: Roșca-Sadursci Liudmila, liudmila.sadurschi@gmail.com; Gîrnet Slavic, girnet_slavic@yahoo.com

MSU: Cara Alena, cara_aliona@yahoo.com; Bancu Cristina, bancu.cristina33@gmail.com

SUMPh: Gavriluc Pavel, gavrilucpavel@gmail.com; Alexandru Garbuz, alexandru.garbuz@usmf.md; Greta Balan, greta.balan@usmf.md

TUM: Rostislav Călin, rostislav.calin@isa.utm.md; Mihail Gavrilă, mihail.gavrilita@faf.utm.md; Elena Gogoi, elena.gogoi@faf.utm.md

Mentors:

AAU: Andreea Ioana Bujac, andreea@business.aau.dk

AAU: Romeo V. Turcan, rvt@business.aau.dk

Assessment

The students will be assessed on the basis of:

- group project written report, and
- individual performance during the group exam.

The weight of the written project is 40% and individual performance during the group exam is 60%.

The group exam will last 2 hours, app split into: Introduction, individual presentations, short break, Q/A cross examination, feedback and final marks.

In addition to formal examination, the students' team work and projects will be informally assessed by a panel of practitioners from various industries; the first three groups will receive prizes.

PBLIP announcements

AESM: <http://ase.md/avize/selectarea-studentilor-prtipicanti-la-realizarea-proiectului-interdisciplinar-pbl-pblip.html>

USARB: <https://media.usarb.md/2019/01/26/concurs-de-selectie-a-studentilor-usarb-pentru-participare-la-realizarea-proiectului-interdisciplinar-pbl-pblip/>

CSU: <http://pblmd.usch.md/wp-content/uploads/2019/01/Anunt.pdf>



Assigned PBLIP coordinator:

Larisa Bugaian

Tel: + 373 22 23 37 05

E-mail: larisa.bugaian@adm.utm.md

<http://www.pblmd.aau.dk/spillover-effects/inter-disciplinary-and-inter-institutional-student-projects/>

<https://www.moodle.aau.dk>

MSU: <http://usm.md/?p=20943&lang=ro>

SUMPh: <http://dreie.usmf.md/anunt-de-selectare-a-studentilor-participanti-la-realizarea-proiectului-interdisciplinar-pbl-sanatate-publica/>

TUM: <https://utm.md/blog/2019/01/29/anunt-de-selectare-a-studentilor-participanti-la-realizarea-proiectului-interdisciplinar-pbl-pblip/>;
https://www.facebook.com/ciorba.dumitru/posts/2535819636433818?comment_id=2536211379727977&reply_comment_id=2536225306393251; <https://utm.md/blog/2019/01/29/anunt-de-selectare-a-studentilor-participanti-la-realizarea-proiectului-interdisciplinar-pbl-pblip/>;
<https://utm.md/blog/category/pblmd/>

Figure 1: Sustainable Development Goals



Appendix 1: Project template

See next page



Project Title

Semester: 4

Project theme: Interdisciplinary project within the framework of Sustainable Development Goals

Project period: Feb – Apr, 2019

ECTS:5

Supervisory team: Supervisors: 1 and 2; Mentors: Andreea Ioana Bujac; Romeo V. Turcan

Project group number: X

[Name 1]

[Name 2]

[Name 3]

[Name 4]

[Name 5]

[Name 6]

Number of words: XXXX

By signing this document, each member of the group confirms participation on equal terms in the process of writing the project. Thus, each member of the group is responsible for the all contents in the project.

Chisinau, 2019

This project is funded by the European Commission. Financial support from the European Commission for this project does not constitute an endorsement of the content that reflects only the views of the authors, and the Commission is not liable for any use of the information contained in this draft document.

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ABSTRACT

Max 1 page, Times New Roman 12, single space

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7. CONCLUSION

REFERENCES

Use only Chicago style for citation and referencing:

http://www.chicagomanualofstyle.org/tools_citationguide/citation-guide-2.html

Appendix 1: Reflections on the PBLIP process

Group dynamics: how issues were discussed, solved, agreed upon, (dis)agreement on all steps,

Decision making process: how decisions were made, why you made specific decisions/choices e.g., in relation to problem, theory, method; what were the alternatives discussed

Relationship with supervisors/mentors: how students/supervisor prepared for meetings, how did the feedback was taken into consideration and why; how you prepared for the meeting.

Appendix 2: Meeting notes

Date, agenda, attendees, chairperson and secretary (who takes notes) both on a rotating basis, decisions made, action plan before next meeting, next meeting date

Appendix 3: Add as necessary

Appendix 2: Anti-plagiarism guide

According to Merriam-Webster On-line Dictionary to “plagiarize” means to:

- steal and pass off (the ideas or words of another) as one's own
- use (another's production) without crediting the source
- commit literary theft
- present as new and original an idea or product derived from an existing source

Plagiarism is an act of **fraud**: it involves **stealing** someone else's work and **lying** about it afterward (www.plagiarism.org).

The assessment of PBL Interdisciplinary Project is based on the recognition of students' **personal achievements**. Any written work that you submit must therefore be your own. Plagiarism of other people's work whether passages are copied directly without attribution, or with slight rewording, is wholly unacceptable and will be heavily penalised. This remains true irrespective of whether the work in question is listed in the reference section.

The following three rules will help you to avoid plagiarism. If you are in any way uncertain about what constitutes plagiarism always consult your supervisors.

1. The language in your submission must either be your own or a direct quote from the original author.
- Changing a few words or phrases from another writer's work is not enough to satisfy point 1 above. The writing is either your own or the other person's; there are no in-betweens.
 - Footnotes/endnotes can be used to acknowledge that a fact or opinion comes from another writer. If the language comes from another writer, quotation marks are necessary in addition, to a footnote.

An Example

The following original passage can be found in MacIntosh, R. and MacLean, D. (1999), Conditioned Emergence: A Dissipative Structures Approach to Transformation, *Strategic Management Journal*, Vol 20, No. 4, 1999 ... this passage appears on p299-300.

“It is clear that in many respects the content and process views of strategy are complementary if taken as a set or incomplete if treated as individual elements. If one likens the issue to a journey, the content approach has a clear destination but the means of transport is indeterminate whereas with the process approach the transport is known and in motion, but the journey is something of a “mystery tour.” One could argue that if a complete theory of strategy is in fact needed, why not just use the two approaches as appropriate as is indeed the practice in many institutions. It is our belief however that an overall framework which transforms and reconciles the mutually contradictory assumptions of each approach would constitute a significant step forward, in both practical and scholarly terms.”

Student Version	Summary
In many respects the content and process views of strategy are complementary if taken as a set or	Obvious plagiarism: word-for-word repetition without

incomplete if treated as individual elements.	acknowledgement.
In many respects the content and process views of strategy are complementary if taken as a set or incomplete if treated as individual elements ¹	Still plagiarism: The footnote alone does not help. The language in the main body of the text is still that of the original authors. Only quotation marks around the whole passage plus the page numbers where the quote appears would be correct.
(MacIntosh and MacLean, 1999).	
The process and content views of strategy may be viewed as complementary. The content view focuses on a clear destination but doesn't explain the means of transport. The process view focuses on the means of transport but the destination remains a mystery tour.	Still plagiarism: The original work has been paraphrased, with a few words changed or omitted, but by no stretch of the imagination is the student writer using his own language.
'It could be argued that a complete theory of strategy is needed using the two approaches as appropriate.'	Not quite plagiarism, but incorrect and inaccurate:
(MacIntosh and MacLean, 1999)	The quotation marks indicate exact repetition of what was originally written. The student writer, however, has changed some of the original and is not entitled to use the quotation marks. Also, there is no indication of which page number the quotes were taken from.
When considering the literature on strategy research, some argue that the process and content views of strategy may be complementary so long as they are considered in tandem (e.g. MacIntosh and MacLean 1999). Indeed it has been argued that 'an overall framework which transforms and reconciles the mutually contradictory assumptions of each approach would constitute a significant step forward, in both practical and scholarly terms.' (op cit. p300)	Correct: In the first sentence, the student writer uses his own words to summarize a view found in the literature whilst acknowledging the source of the insight. In the second sentence, a quotation is used to make a specific point and the citation specifies which article the quote is drawn from and the page on which it appears. The quotation is also an accurate and verbatim copy from the original source.

April 12, 2019

Research problem

Background

(Cont'd)

- **PBLIP is part of PBLMD project**
- **It aims at enhancing teaching and learning capacity of faculty and students**
 - **Faculty:** it allows the faculty to engage in joint, inter-disciplinary and inter-institutional supervision, to evaluate inter-disciplinary and inter-institutional group projects, to conduct group exams and assess individual student's performance and the group performance, to offer feedback to the students and the groups
 - **Students:** it allows the students to form inter-disciplinary and inter-institutional groups, to jointly identify a problem, to identify and use theories and methods to address the problem, to finalize and write an inter-disciplinary and inter-institutional project, to participate in a group exam, to present as a group and individually the project and own reflections
- **6 universities took part in PBLIP: ASEM, BSU, CSU, SUM, SUMPh, TUM**

Background

(Cont'd)

- **PBLIP is 5 ECTS project; 4th semester**
- **It started on Feb 21 and finished with group exam on April 12**
- **The scope of PBLIP was defined by the 17 UN SDG**
- **Each group was allocated a set of goals and identified a problem for its project within the allocated set of goals**



PBLIP in Action

➤ Distribution of SDGs per group

Group 1				
Group 2				
Group 3				
Group 4				
Group 5				

PBLIP in Action

(Cont'd)

➤ Composition of the groups and the supervision teams

	Students	Affiliation: BSc in ...	Supervisors	Affiliation
Group 1	Zanoaga Mariana	Public Health	Bancu Cristina	MSU
	Fistic Cristofor	Software Engineering	Mihaela Vidaicu	MSU
	Bogdan Adriana	Business and Administration and Entrepreneurship	Mihaela Crugliçi	BSU
	Scolnic Andrei	Public Administration		
	Baraliuc Igor	Business and Administration		
	Baidan Liliana	Law		
Group 2	Lupascu Catalin	Public Administration	Mihail Gavriļa	TUM
	Cirnat Nadejda	Software Engineering	Natalia Zamfir	MSU
	Rudi Georgiana	Public Health	Roşca-Sadursci Liudmila	CSU
	Paduraru Ana	Business and Administration and Entrepreneurship		
	Danilov Maxim	Business and Administration		
	Rusu Gheorghe	Law		
Group 3	Lupan Diana	Business and Administration and Entrepreneurship	Elena Gogoi	TUM
	Botezatu Denis	Public Administration	Gavriliuc Pavel	SUMPh
	Moraru Daniela	Business Administration	Solcan Angela	ASEM
	Tofan Victor	Law		
	Gurduza Vasile	Software Engineering		
	Badrajan Alina	Public Health		
Group 4	Botnaru Ina	Software Engineering	Gîrneţ Slavic	CSU
	Cissa Marina	Public Health	Alexandru Garbuz	SUMPh
	Iacobache Evelina	Business and Administration and Entrepreneurship	Gaugaş Tatiana	ASEM
	Latco Alexandr	Public Administration	Ina Odinokaia	
	Foiu Adriana	Business and Administration		
	Mazniuc Diana	Law		
Group 5	Vatamaniuc Vasile	Business and Administration	Rostislav Călin,	TUM
	Onica Mariana	Software Engineering	Greta Balan	SUMPh
	Lungu Catalina	Public Health	Mariana Spatari	BSU
	Pocotilo Mihai	Business and Administration and Entrepreneurship		
	Daurova Vladislava	Public Administration		
	Onefrei Luminita	Law		

PBLIP in Action

(Cont'd)

➤ Project titles

- **Group 1:** Explore the impact of recycling on socio-economic inclusion
- **Group 2:** Study the impact of biomass on farmers
- **Group 3:** Understand how sustainable development in rural areas affect the quality of drinking water
- **Group 4:** Investigate the impact of social inclusion of 60+ on the development of public institutions
- **Group 5:** Explore the participation of Public-Private-Partnerships in environmental projects in the context of sustainable development

PBLIP in Action

(Cont'd)

- **Results of the project competition day**
- ***Judges:***
 - **Boris Efimov**, CEO, Orhei-Vit
 - **Eugen Hristev**, General Director, Trimetrica Ltd
 - **Tatiana Petrova**, Head of Medical Devices Department, Becor Ltd
 - **Dorin Recean**, CEO and Founder, PERFORMA
 - **Rodica Verbeniuc**, Director, The Moldovan Investment Promotion Agency
- **Assessment:** 70% by judges; 30% by peers
- **Results:**

➤ 1st place:	Group 4
➤ 2nd place:	Group 2
➤ 3rd place:	Group 1
➤ 4th place:	Group 3
➤ 5th place:	Group 5



Certificate of Attendance

This is to certify that _____
has participated in the Problem-Based Learning inter-disciplinary and inter-institutional project (PBLIP) organized at Technical University of Moldova during February 21 and April 12, 2019 as part of the PBLMD project. PBLIP has a total of 5 ECTS.

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April 12, 2019
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