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Introducing Problem Based Learning in Moldova: Toward Enhancing Students' Competitiveness and Employability (PBLMD)

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# "BSc in Entrepreneurship and Business Administration": Pilot Study Student-Centred Active-Learning Programme

# Cahul State University "Bogdan Petriceicu Haşdeu"

# Work Package 3

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#### Cahul, 2017

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The purpose of this study is to conduct a comparative analysis of the study programmes in entrepreneurship at the University B.P. Hasdeu of Cahul with study programmes at Aalborg University and Gloucestershire University, whose experience and best practices will serve as a basis for the elaboration of proposals to modify the study programme in the field of *Entrepreneurship and Business Administration* at the Faculty of Economics, Engineering and Applied Sciences, from *State University of Cahul*. The experience taken over from these universities will essentially contribute to the implementation of new and modern teaching methods, centered on the student. These methods mean that all students are trained how to apply theoretical knowledge in practice by solving a problem. At the same time, this model encourages students to develop their skills of communication, group work, and analytical vision to solve the problem.

One of the student-centered methods used in a number of EU universities is Problem-Based Learning (PBL), where less emphasis is placed on memorizing a curriculum or pure theory, and mainly addresses specific problems through projects. This type of educational approach includes individual research that promotes the individual characteristics of a student's creative initiative and thinking. Students learn strategies of thinking and knowledge in the field. PBL's aims are to help students develop flexible knowledge, effective problem-solving skills, self-directed learning, effective collaboration skills and intrinsic motivation. Problem-based learning is an active learning style.

The working team on this report was made up of:

Nr. d/o	Surname, name	Title, function in SUC	Position in the team
1.	Roșca-Sadurschi Ludmila	Senior lecturer, Head of department EMAS	Team leader
2	Andrei Popa	Dr.hab., Professor, Rector of SUC	Team member
3.	Todos Irina	Assoc.prof., PhD, Vice-rector of SUC	Team member
4.	Gîrneț Slavic	Senior lecturer	Team member
5.	Vulpe Olesea	Lecturer	Team member
6.	Noni Ludmila	Lecturer	Team member

Table 1. Composition of the working team on the report

# **2. REVIEW OF LITERATURE AND SYNTHESIS OF SOURCES**

#### 2.1 INTRODUCTION

Trends in modern education require a deep focus on student-centered methods. The advantages of these methods determine the necessity of a more complex study in order to implement them in the education system of the higher education institutions of the Republic of Moldova.

During the study visits, the team members had the opportunity to analyze how to apply student-centered methods in practice in institutions such as: Aalborg University (Denmark), University of Gloucestershire (UK), KTH Royal Institute of Technology (Sweden), University of Siegen (Germany).

For a deeper understanding of the principles of student-centered methods, it is necessary to study the specialized bibliographic sources. In this respect, the following sources were consulted:

- 1. New Approaches to Problem-Based Learning: Revitalising Your Practice in Higher Education/ edited by Terry Barrett and Sarah Moore
- 2. Problem- based Learning Online/ edited by Maggi Savin-Baden and Kay Wilkie
- 3. Problem-Based Learning: Case Studies, Experience and Practice/ edited by Peter Schwartz, Stewart Mennin and Graham Webb
- Psychology for Psychologists: A Problem Based Approach to Undergraduate Psychology Teaching/ edited by Alexia Papageorgiou, Peter McCrorie, Stelios Georgiades and Maria Perdikogianni
- 5. Teaching for Quality Learning at University: What the Student Does, 4<sup>th</sup> edition/ edited by John Biggs and Catherine Tang
- 6. The Power of Problem-Based Learning: A Practical "How to" for Teaching Undergraduate Courses in any Discipline/edited by Barbara J.Duch, Susan E. Groh and Deborah E. Allen

The first analyzed source, *New Approaches to Problem-Based Learning: Revitalising Your Practice in Higher Education / edited by Terry Barrett and Sarah Moore*, highlights the idea that problem-based learning (PBL) is a pedagogical approach that has the capacity to create vibrant and active learning environments in higher education. The new approach to problem-based learning is: Revitalizing practice in higher education provides guidance from a range of different, complementary perspectives.

Lecturers, practitioners in the field, and new voices in PBL teaching and learning have collaborated to create this guide. Each chapter offers practical and experimental ideas on problems and ideas for PBL, as well as a theoretical and evidence-based basis. Whether the reader is an experienced or new PBL practitioner in the PBL processes and principles, this book will help him / her find ways to revitalize and enrich his / her practice and improve learning experience in a range of contexts in higher education.

The book consists of 20 chapters, which are grouped in three parts:

1. Stakeholders designing PBL initiatives (chapters 1-8);

- 2. Students using PBL to enhance capabilities (chapters 9-14);
- 3. Sustainability and building capacity in PBL initiatives (chapters 15-20).

The book "*Problem- based Learning Online*"/ *edited by Maggi Savin-Baden and Kay Wilkie* is a great opportunity to distinguish the challenge of the diversity of learning technologies and their complicated association with pedagogical approaches. The terms used in the book - combining, uniting and interdependence - in some ways undermine the major challenges it raises.

It is the first book that: addresses current problems and online problem-based learning (PBL) together in a single volume; presents and explores the range and diversity of online PBL application; presents solutions on how course design influences learning in PBL.

The book provides research-based information on the realities of setting up and conducting problem-based study programmes, using technology in a variety of ways.

The book *Problem-Based Learning: Case Studies, Experience and Practice / edited by Peter Schwartz, Stewart Mennin and Graham Webb* mentions that problem-based learning (PBL) is becoming widely used in higher education. Popular in medical science, PBL now finds applications in the field of engineering, science and architecture - and is very applicable in many areas. It is a powerful teaching technique that addresses both students and educators. This book will be of great value for those who want to improve their use of PBL and for those who want to learn more and to implement it. It provides convincing examples of PBL experiences from eight countries, including the UK, USA, Canada, Australia and New Zealand, and gives readers the opportunity to understand PBL and develop strategies for their own curriculum in any subject and at many levels.

The book *Psychology for Psychologists: A Problem Based Approach to Undergraduate Psychology Teaching/ edited by Alexia Papageorgiou, Peter McCrorie, Stelios Georgiades and Maria Perdikogianni* uses psychological theories and learning processes, such as problem-based learning (PBL), to provide a new approach to teaching Psychology in the first cycle, Bachelor's degree studies, and to prevent the decrease of motivation. It creates a detailed example of a degree of psychology using the PBL method and suggests how a course week could be planned.

"*Teaching for Quality Learning at University: What the Student Does*, John Biggs and Catherine Tang. This book is an exceptional introduction to some difficult ideas. It is full of good advice for every academician who wants to do something practical to improve his / her students' learning.

Biggs and Tang present a unified vision of university education, which is grounded in both research and theory, and is full of advice for novice instructors and experts. The book will inspire, provoke, disturb, bother and even angry readers, but will help them to think about how high-quality teaching can contribute to high-quality learning.

The book includes a wide variety of fields and disciplines, as well as examples from the authors' experience in implementing constructive alignment in various countries: Australia, Hong Kong, Ireland, North America, etc.

The Power of Problem-Based Learning: A Practical "How to" for Teaching Undergraduate Courses in any Discipline/edited by Barbara J.Duch, Susan E. Groh and Deborah E. Allen. The University of Delaware is internationally recognized as a center of excellence in the use and development of PBL. This book presents the accumulated knowledge and practical experience gained over nearly a decade of PBL integration into courses in a wide range of disciplines.

The book is about "HOW TO?". It focuses on the practical questions that a teacher who wants to practice PBL has: "Where do I start?" – "How do I formulate problems?" – "What do I need to know about managing groups?" and so on

#### 2.2 POLICIES TO MODIFY STUDENT-CENTERED STUDY PROGRAMMES AND CURRICULA

Student-centered education is one of the main milestones in the reform of European higher education, known as the Bologna Process. Students, teaching staff, and higher education institutions contribute to the achievement of student-centered education.

The quality of education depends on several factors, one of the key factors being the quality of the design of the educational process. Curricular design, existing in the higher education institutions of the Republic of Moldova, requires continuous improvement<sup>1</sup>.

The study programmes based on the student-centered training model requires a paradigm shift and therefore a change in the mentality of the teachers responsible for designing and delivering the qualification programmes. This implies that programmes must be organized in order to achieve the stated learning outcomes.

Under the current conditions, more and more universities focus on student-centered learning and teaching, based on curriculum development taking into account the learning outcomes that students have to achieve at different levels<sup>2</sup>.

Learning outcomes should be reflected on 3 levels:

- *At institutional level*, as an affirmation of what university graduates are supposed to be able to do;
- *At programme level*, as an affirmation of what graduates of a study programme should be able to do;
- *At the discipline level,* as an affirmation of what students should be able to know and use at the end of a course <sup>3</sup>.

Student-centered study programmes should be designed in such a way that students develop their specific mix of skills that are considered useful and necessary to the academic, professional and / or vocational domains.

A learning outcome is a measurable result of a learning experience that allows the skill degree / level / standard formed or developed by the student to be determined.

The authors recommend un dertaking the next steps before developing the learning outcomes:

1. we have to decide which knowledge should be involved;

<sup>&</sup>lt;sup>1</sup> CENTRAREA PE STUDENT ÎN CONTEXTUL PROCESULUI BOLOGNA, Roza Dumbrăveanu, Chișinău 2014, p. 5

 $<sup>^2</sup>$  Teaching for Quality Learning at University: What the Student Does,  $4^{th}$  edition/ edited by John Biggs and Catherine Tang, p.9

<sup>&</sup>lt;sup>3</sup> idem, p.113

- 2. selecting topics to be taught;
- 3. we need to decide on the purpose of teaching the subject and determining the level of performance achieved by students<sup>4</sup>.

The curriculum map will help to verify that the results match those set out in the programme. This requires a systematic review of the results provided in the programme with those obtained after graduation<sup>5</sup>.

An overriding role in implementing new educational approaches, namely student - centered training programmes or curricula, is the responsibility of the university management. Most importantly, they must set a right balance between upward and downward innovation approaches, develop a proper incentive system, recognize the different needs of the faculties, monitor and find a compromise between the cost-benefit ratio of innovation, to provide support for innovation and to collect relevant data demonstrating the effectiveness of innovation.<sup>6</sup>

John C. Cavanaugh believes that "in order to implement this change, it is essential that it be sustainable and long-term oriented. The secret of sustainability is relatively simple: a) establishing a sustainable programme of faculty development, b) maintaining an appropriate combination of incentives, c) creating the need for a new training plan or curriculum, etc.) generating advertising and recognition".<sup>7</sup>

New curricula should be developed on the basis of the following provisions: organization of content around problems, orientation of learning on accumulation of experience and individual perspectives for students, use of students' personal knowledge and experience as a starting point for analysis, development of critical thinking skills, analytical skills and skills for continuous development.<sup>8</sup>

In the book *"Problem-Based Learning case studies, experience and practice"* it is mentioned that one of the pioneers of introducing the PBL method was the *University of McMaster Medical School in Canada* that introduced the PBL study programme in the second half of the ,60s. After which a growing number of educational institutions implemented the PBL in their study programmes. The results of the research where the effects of the student-centered PBL study programme are relevant (*Albanese and Mitchell, 1993; Schmidt, 1987; Vernon and Blake, 1993*). Among the results obtained, we note the following<sup>9</sup>:

• Students who studied under the PBL study programme had the same performances as students in the traditional curriculum;

<sup>&</sup>lt;sup>4</sup> idem,p.130

<sup>&</sup>lt;sup>5</sup> idem,p.125-130

<sup>&</sup>lt;sup>6</sup> The power of problem-based learning: a practical "how to" for teaching Undergraduate Courses in Any Discipline", edited by Barbara J.Duch, Susan E. Groh, and Deborah E. Allen, 2001, p.36

<sup>&</sup>lt;sup>7</sup> idem, p.34

<sup>&</sup>lt;sup>8</sup> The power of problem-based learning: a practical "how to" for teaching Undergraduate Courses in Any Discipline", edited by Barbara J.Duch, Susan E. Groh, and Deborah E. Allen, 2001, p.200

<sup>&</sup>lt;sup>9</sup> Problem-Based Learning: Case Studies, Experience and Practice/ edited by Peter Schwartz, Stewart Mennin and Graham Webb, p. 3

- Students who studied under the PBL study programme are superior to the students in the traditional curriculum in the following aspects: approach to studies; knowledge gained for the long term; motivation towards studies; perception of stress during studies;
- The teaching staff of the interviewed faculty appreciate more positively the involvement and the role of the students who studied unde the PBL study programme;
- The costs of applying the PBL study programme are comparable to those of the traditional curriculum in a class of approximately 100 people.

The idea of effective management within PBL is actively promoted in the first section of the book, which includes 8 case studies related to PBL study programmes.

Problem based learning is explained and developed in *Psychology for Psychologists: A Problem Based Approach to Undergraduate Psychology Teaching*. The authors provided a summary of teaching theories, namely the origins of problem-based learning<sup>10</sup> (Barrows 1980), arrangements for the practical application of modern teaching theories<sup>11</sup> (Schmidt 1983) and ways of organizing classes so that students learn skills to solve problematic situations.

It is important to note the competences developed by students through problem-based learning, namely: systematic learning abilities, leadership competences, sensitivity in approaching teamwork, development of explanation, listening and negotiation skills, etc.<sup>12</sup>. (Dolmans, 2005).

The authors have identified various methods of applying problem-based learning and have argued in favor of developing a problem-based curriculum, compared to traditional study programmes<sup>13</sup> (Colliver, 2000).

Various ways of assessing students' knowledge were identified and explained in the chapter "Evaluating students in problem-based education programmes". The authors highlighted the principles of knowledge assessment, process orientation versus outcome orientation, feasibility of evaluation criteria, validation of evaluations, and provide examples of questions to evaluate students' knowledge<sup>14</sup> (Hays, 2008).

Currently, more and more experts support the idea of training specialists in various fields through modern technologies. The authors of the book *Problem-based Learning Online* illustrate a number of advantages and features of PBL-based training through the figures on pages 63, 68, 83, 95.

The subjects of the training process have suffered very many positive transformations, the roles and rules of communication and goal setting for each category of participants in the learning process have changed. New training programmes (curricula) should focus on three basic principles: Learning through modeling and simulation, self-directed learning, and learning by doing.

<sup>&</sup>lt;sup>10</sup> Psychology for Psychologists: A Problem Based Approach to Undergraduate Psychology Teaching/ edited by Alexia Papageorgiou, Peter McCrorie, Stelios Georgiades and Maria Perdikogianni, p. 19

<sup>&</sup>lt;sup>11</sup> idem, p. 20

<sup>&</sup>lt;sup>12</sup> Psychology for Psychologists: A Problem Based Approach to Undergraduate Psychology Teaching/ edited by Alexia Papageorgiou, Peter McCrorie, Stelios Georgiades and Maria Perdikogianni, p.26

<sup>13</sup> idem, p.28

<sup>14</sup> idem, p.35

#### **2.3** CHANGES IN STUDENT, TEACHER AND STAKEHOLDER RELATIONSHIPS

The authors of the book *"Teaching for Quality Learning at the University: What the Student Does"* claim that the efficiency of teaching in teachers depends on how to think and appreciate what the teaching process is. Three levels of teaching thinking are known. The first two are blame models, in the first case of the student, in the second – of the teacher. The third model integrates teaching and learning, appreciating effective teaching as encouraging students to use learning activities to achieve the proposed learning outcomes<sup>15</sup>.

The first level focuses on differences between students: they are good and weak students. Thus, teachers see their responsibility as knowing the course and its clear exposure. The transmission of information takes place through traditional teaching, so the differences in material assimilation and learning among students are explained by skills, motivation, what school they have graduated, etc.<sup>16</sup>

Teachers at second level focus on what teachers do. This model is also based on transmission, but the transmission of concepts and understanding, not just information. The learning process is appreciated according to what the teacher does and not the type of student they interact with. This method of teaching is centered on the teacher<sup>17</sup>.

The third level focuses on what the student does and how he / she addresses the teaching process. This model of teaching is student-centered and the purpose of teaching is to provide learning support.

So, according to this model, the role of the teacher changes, he / she is no longer the decisive factor and the expert, and this can create psychological barriers for many teachers who are accustomed to the traditional teaching system. <sup>18</sup>

In the case of PBL, the relationship between student and teacher changes: the teacher is seen as a mentor, helping students to adapt as much as possible and "perceive" the problem.<sup>19</sup>

Usually PBL involves students' work in groups of 3-7 persons. This interaction is more acceptable because the members of such a group feel more comfortable and this increases the degree of their involvement in the group.<sup>20</sup>

Discussions, debates, problem analysis in the team and reaching consensus are the necessary conditions of democracy, which, applied in society, offer it many opportunities. Thus, PBL allows students to overcome many obstacles and go beyond both personal and society boundaries.<sup>21</sup>

<sup>&</sup>lt;sup>15</sup> Teaching for Quality Learning at University: What the Student Does, 4<sup>th</sup> edition/ edited by John Biggs and Catherine Tang, p. 16

<sup>&</sup>lt;sup>16</sup> idem, p. 18

<sup>&</sup>lt;sup>17</sup> Teaching for Quality Learning at University: What the Student Does, 4<sup>th</sup> edition/ edited by John Biggs and Catherine Tang, p. 19

<sup>&</sup>lt;sup>18</sup> idem, p. 20

<sup>&</sup>lt;sup>19</sup> The power of problem-based learning: a practical "how to" for teaching Undergraduate Courses in Any Discipline", edited by Barbara J.Duch, Susan E. Groh, and Deborah E. Allen, 2001, p. 200

<sup>&</sup>lt;sup>20</sup> idem, p. 197

<sup>&</sup>lt;sup>21</sup> idem, p. 197

Once there is an understanding in the application of PBL, both teachers and students require adequate training and time to accept changes that will interfere with their roles and behavior. The case study "Come and see the real thing"<sup>22</sup>, is a relevant example demonstrating that active involvement of teachers in PBL tasks addressed to student can raise questions and raise doubts that can not be successfully overcome until more experience is gained.

Also collaborating with external experts and potential employers can help to understand the key issues in PBL. The hypothesis is supported by the case study called "Why do faculties have teachers if they do not teach?"<sup>23</sup>.

At the same time, the book presents at least two examples, "Did the students do this?" and "They did not lift their weight"<sup>24</sup>, in which the collaboration between students and teachers has resulted in positive outcomes.

Effective communication and collaboration are axiomatic to any human progress. The cases illustrated in this book show how important communication is both among the faculty members who apply PBL and among the students working in the same group, and of course between the teachers and students involved in the PBL process.

In the book "*Problem-Based Learning case studies, experience and practice*" it is stated that when applying PBL students usually work in small groups supervised by a tutor having the role to facilitate discussion and study process without being a direct source of information. This brings about a change in both the role of the teacher and the change of the teacher-student relationship.

The problem-based teaching method is also described and explained in the book *Psychology for Psychologists: A Problem Based Approach to Undergraduate Psychology Teaching* based on teamwork. It is proposed that students create groups that will be given problematic situations to solve. These "problems" can be formulated as case studies, clinical examples, in written, graphic, visual form, etc. Then, students will be suggested to apply the seven steps to solve the problem according to the problem-based teaching method<sup>25</sup> (Schmidt, 1983). Documentation, research of problem is part of the method - students are encouraged to come up with their own ideas and suggestions to solve the problematic situation, based on the theoretical knowledge previously obtained and during the application of this method.

The role of tutors (course creators or teachers) is very well detailed in the book *Problem-based Learning Online* on pages 90-97. According to those presented, it is intended to implement a type of participatory training where the relationship between the teacher and the learner is focused on: mutual information, facilitating access to information, negotiation and training. Figure 6.2 on page 91 illustrates schematically the role of tutors in face-to-face training versus on-line training.

<sup>&</sup>lt;sup>22</sup> Problem-Based Learning: Case Studies, Experience and Practice/ edited by Peter Schwartz, Stewart Mennin and Graham Webb, p.13

<sup>&</sup>lt;sup>23</sup> Problem-Based Learning: Case Studies, Experience and Practice/ edited by Peter Schwartz, Stewart Mennin and Graham Webb, p. 98

<sup>&</sup>lt;sup>24</sup> idem, p. 163

<sup>&</sup>lt;sup>25</sup> Psychology for Psychologists: A Problem Based Approach to Undergraduate Psychology Teaching/ edited by Alexia Papageorgiou, Peter McCrorie, Stelios Georgiades and Maria Perdikogianni, p. 20

#### 2.4 INNOVATIVE STUDENT-CENTERED PBL AND ACTIVE LEARNING

The authors of the book *Teaching for Quality Learning at University: What the Student Does,*  $4^{th}$  *edition,* John Biggs and Catherine Tang refer to PBL (problem-based learning) as an innovative teaching method, it is mentioned that it is most often used in professional education, but can also be used in teaching basic disciplines<sup>26</sup>.

There are several changes and versions of PBL, but they should focus on five objectives:

- 1. Structuring knowledge for use in lucrative contexts. PBL is concerned about the enhancement of knowledge that can be used in practice.
- 2. Elaboration of justification processes, such processes include problem solving, assumptions, decision-making.
- 3. Developing their own learning skills: generic skills in the field, content specific skills and especially self-management skills.
- 4. Higher motivation for learning, students are placed in a context that requires their immediate involvement.
- 5. Developing group work skills.

Albanese and Mitchell (1993) made an analysis of the studies published between 1972 and 1992, reaching the following conclusions:

- Both teachers and students appreciate PBL at a higher level than traditional teaching;
- In PBL, students use more complex strategies to understand the material and work individually;
- PBL students become more in-depth in their learning approaches because they use much more varied sources than regular students who usually rely on course notes or the reference manual<sup>27</sup>.

The characteristics of a "good" problem, in Barbara J. Duch's opinion, are as follows:

- The effective problem must attract the student, interest him / her, and motivate him / her for a deeper understanding. This must be as real as possible.
- The problem that works well encourages students to make decisions based on arguments, facts, information, logic and / or rationalization.
- The problem must be complex and require the cooperation of all team members to solve it.
- The first question at the first level of the problem study should be open, based on existing knowledge and / or be questionable so that all students can participate in the discussion.
- The objectives of the content of the discipline must be included in this problem and be conductors between the students' existing knowledge and new concepts.<sup>28</sup>

<sup>&</sup>lt;sup>26</sup> Teaching for Quality Learning at University: What the Student Does, 4<sup>th</sup> edition/ edited by John Biggs and Catherine Tang, p. 179

<sup>&</sup>lt;sup>27</sup> Teaching for Quality Learning at University: What the Student Does, 4<sup>th</sup> edition/ edited by John Biggs and Catherine Tang, p. 182

<sup>&</sup>lt;sup>28</sup> The power of problem-based learning: a practical "how to" for teaching Undergraduate Courses in Any Discipline", edited by Barbara J.Duch, Susan E. Groh, and Deborah E. Allen, 2001, p. 47-50

In addition, a well-conceived problem must always be described (basic idea, real conditions of activity, introduction of the student into the problem data, description of a detailed plan on how to use the problem in his / her course, identification of resources for students).<sup>29</sup>

In the book *"Problem-Based Learning case studies, experience and practice"* it is stated that in student-centered education, students are the ones who assume responsibility for their own knowledge, this being the basic philosophy of the PBL process<sup>30</sup>.

In active learning, the student usually undertakes the following steps<sup>31</sup>:

- 1. the student first encounters a problem without having previously documented on the subject;
- 2. after that they interact in group with each other to explore the existing knowledge that is tangent to the problem proposed for the study;
- 3. formulates and tests hypotheses that may matter in solving the problem;
- 4. identifies future learning objectives to progress in the proposed study;
- 5. studies individually between group meetings;
- 6. reintegrates with his / her group to share the acquired knowledge and apply them in the study of the problem;
- 7. repeates the step 3 to step 6, if necessary;
- 8. reflects on the process and the content that has been learned.

Another extremely important aspect in the book argues that even the evaluation methods used in the PBL must correspond to the way students learn  $PBL^{32}$ .

The modern PBL method of teaching is superior to the traditional one in many ways, but it also faces some difficulties in the implementation process. Process orientation versus outcome orientation is one of the questions addressed to supporters of this method, says Alexia Papageorgiou, Peter McCrorie, Stelios Georgiades and Maria Perdikogianni, authors of the book *Psychology for Psychologists: A Problem Based Approach to Undergraduate Psychology Teaching*<sup>33</sup>. It is especially important to set criteria for assessing the tasks offered to students in order to make the teaching-learning process as objective and effective as possible. The authors provide a figure illustrating the knowledge gained by students by using the PBL method<sup>34</sup>. Various methods of student assessment are listed through a variety of diverse and varied tests. Many specialists are inclined to use essays as a reflection and meditation test, but also oral evaluation methods, multiple choice questions, true / false questions, brief case studies, etc. are also used<sup>35</sup>. It is widely practiced to present individual tasks and reports and discussion in groups on concrete situations / case

<sup>&</sup>lt;sup>29</sup> idem, p. 50-53

<sup>&</sup>lt;sup>30</sup> Problem-Based Learning: Case Studies, Experience and Practice/ edited by Peter Schwartz, Stewart Mennin and Graham Webb, p. 170

<sup>&</sup>lt;sup>31</sup> idem, p. 2

<sup>&</sup>lt;sup>32</sup> Problem-Based Learning: Case Studies, Experience and Practice/ edited by Peter Schwartz, Stewart Mennin and Graham Webb, p. 149

<sup>&</sup>lt;sup>33</sup> Psychology for Psychologists: A Problem Based Approach to Undergraduate Psychology Teaching/ edited by Alexia Papageorgiou, Peter McCrorie, Stelios Georgiades and Maria Perdikogianni, p. 36

<sup>&</sup>lt;sup>34</sup> idem, p. 40

<sup>&</sup>lt;sup>35</sup> idem, p. 52

studies<sup>36</sup>. Last but not least, it is recommended that students collect information and tasks solved in a portfolio, including in it their own opinions, teacher feedback and other additional information<sup>37</sup>.

In the book *New Aproaches to Problem-Based Learning: Revitalising Your Practice in Higher Education*, the authors Terry Barrett and Sarah Moore pay special attention to the analysis of recently emerged theories in the field that allow you to familiarize yourself with the latest investigations in the PBL elements<sup>38</sup>.

In the first chapter <sup>39</sup> the authors of the book make a review of the evolution of the PBL concept, of defining all the component elements of the PBL integration process in the upper school.

They try to find answers to the following questions:

- What is the value of PBL?
- What new approaches in PBL do teachers apply?
- How can PBL improve the study process?
- How is it possible to revitalize our PBL practices?

According to the authors of the book, the PBL concept consists of 6 basic dimensions, which served as starting points for the writing of the book<sup>40</sup>:

- a) <u>Developing the problem in PBL</u>
- b) <u>PBL monitoring in small teams</u> Typically, they work in teams from 5 to 8 students under the supervision of a tutor.
- c) <u>Evaluations in PBL</u> Appropriate assessment methods can improve the learning process of the student.
- d) Curriculum development in PBL
   Curriculum development in PBL is a multidimensional managerial project (Conway & Little, 2000). Chapter 15 is really useful for the curriculum planning process. The methods of curriculum change are discussed in Chapter 17<sup>41</sup>.
- e) Capacity and knowledge development

Employers are constantly asking for such comptences from higher education graduates: ability to communicate, work in teams, manage information, think creatively and critically, solve various problems, etc.

 f) <u>Philosophy of PBL</u> It tries to determine the roles of all stakeholders involved in PBL: the tutor, the supervisor, the reader, the observer, etc.

<sup>&</sup>lt;sup>36</sup> idem, p. 54

<sup>&</sup>lt;sup>37</sup> idem, p. 58

<sup>&</sup>lt;sup>38</sup> New Aproaches to Problem-Based Learning: Revitalising Your Practice in Higher Education/ edited by Terry Barrett and Sarah Moore, p. 16

<sup>&</sup>lt;sup>39</sup> idem, p. 3

<sup>&</sup>lt;sup>40</sup> idem, p. 4

<sup>&</sup>lt;sup>41</sup> New Aproaches to Problem-Based Learning: Revitalising Your Practice in Higher Education/ edited by Terry Barrett and Sarah Moore, p. 229

The chapters in the book are written by several authors (theoreticians and practitioners), and a great advantage is that they analyze various aspects of PBL from their own experience, accumulated over a long period of time.

## 2.5 INFLUENCE OF INFORMATION AND COMMUNICATION TECHNOLOGIES ON PBL, TRAINING AND CURRICULUM DEVELOPMENT

Educational technologies offer teaching-learning activities that can address a wide variety of learning outcomes. E-learning can be an alternative to traditional classroom teaching and may involve students in specific activities such as, for example, computer based conferences, knowledge forums. Students can work online and use social networks or skype to organize teamwork, interact with teachers or colleagues, and post serious reflections.<sup>42</sup>

The rapid development of Internet-based technologies allows them to be used in curriculum and study programmes development. Depending on the objectives of the course, the teacher can provide students with a list of websites containing useful information, or give them the concrete names of the sources.<sup>43</sup>

In addition, communication between groups or student-student communication in the case of group activity is of great importance. Often, such communications are more effective than classroom discussions in terms of saving time and speed of information exchange. Also, the teacher can communicate more intensely with students through their websites, get feedback quickly from them.<sup>44</sup>

In the book "*Problem-Based Learning case studies, experience and practice*", the need to develop the teaching and consequently the modification of the curriculum to the application of the PBL method is actively promoted. However, none of the 22 case studies presented in the book describes a situation where the impact of ICT in PBL student-centered education is estimated. Case studies predominantly focus on the difficulties of implementing PBL from the perspective of teachers or students, without making a connection with the use of information technologies in the cases presented in the book.

The PBL teaching method, considered by the authors of the book *Psychology for Psychologists: A Problem Based Approach to Undergraduate Psychology Teaching*, involves the analysis of large amounts of information independently and the implementation of knowledge gained from the teacher and accumulated on its own. To facilitate the learning process, various techniques and technologies of communication and teaching can be used. The teacher can use the projector to make interesting and interactive presentations. The MOODLE system offers a multitude of opportunities to place specialized information for the students of a particular course at specific disciplines; assessment of students' knowledge can also be done through MOODLE. Teachers can use Podcast to provide detailed information on the requirements of certain tasks or to provide

<sup>&</sup>lt;sup>42</sup> Teaching for Quality Learning at University: What the Student Does, 4<sup>th</sup> edition/ edited by John Biggs and Catherine Tang, p. 78

<sup>&</sup>lt;sup>43</sup> The power of problem-based learning: a practical "how to" for teaching Undergraduate Courses in Any Discipline", edited by Barbara J.Duch, Susan E. Groh, and Deborah E. Allen, 2001, p. 73

<sup>&</sup>lt;sup>44</sup> idem, p. 72

feedback to students. The online seminars are widely used, thus reaching a common denominator in the case of time divergences. Students can attend classes at home or anywhere in the world.

It is important to capitalize on the technical possibilities offered by modern society, and the teaching-learning process should always be in step with the new discoveries and should benefit from the novelties and innovations in the world of communication technologies.

In the 21st century, it became very common to work and learn in the virtual environment, thinks Maggi Savin-Baden and Kay Wilkie, the authors of the book *Problem-based Learning Online*. Classical learning and communication methods are gradually being replaced by modern ones. Through ICT, the following training modalities have been developed and implemented:

- ✓ Audio lessons and video lessons;
- ✓ Communication applications: Chat and forum;
- ✓ Tasks verification method Drop-Box;
- $\checkmark$  Video conferencing;
- $\checkmark$  Evaluation methods: peer to peer and self-evaluation.

What is amazing, the "Chat", "Drop-Box" and "Forum" methods are much more popular than face-to-face training. Thus, learners appreciate the convenience of remote communication.

#### **2.6 CONCLUSIONS**

In the process of teaching, we must focus not only on what we should teach, but on what we would like our students to know and how we can help them achieve these outcomes. Teaching materials delivery and assimilation are developed and implemented to align with these outcomes. The book *Teaching for Quality Learning at University*, 4<sup>th</sup> edition, Open University Press is an aid to university professors who want to improve their teaching quality and focus more on student-centered learning. It includes both theoretical milestones, studies, and practical recommendations for novices and experts from the academic environment. This work helps you think about how the high quality of teaching can contribute to raising the quality of learning.

Problem-based learning - is a training strategy that helps students acquire special thinking skills and communication skills that are so necessary in the modern world.<sup>45</sup>

Today's students must be developed multilaterally, even more than 10 years ago. The problems the future professionals will face differ in their complexity and therefore require innovative interdisciplinary approaches in the field of training.<sup>46</sup>

Under the influence of PBL, all aspects of modern training change: the emphasis is on selfdevelopment of the student with the necessary support of the teacher, the relationship between students, teachers and enterprises involved in the PBL process, the teaching methods are changed, the role of information technology increases in the training process.

<sup>&</sup>lt;sup>45</sup> The power of problem-based learning: a practical "how to" for teaching Undergraduate Courses in Any Discipline", edited by Barbara J.Duch, Susan E. Groh, and Deborah E. Allen, 2001, p. 3

<sup>&</sup>lt;sup>46</sup> idem, p. 4

Summarizing the content of the book ,,*Problem-Based Learning case studies, experience and practice*", we note a number of difficulties in the implementation of PBL that have repeatedly emerged in the case studies presented in this paper.

In particular, these difficulties / barriers in the application of PBL referred to the following aspects <sup>47</sup>:

- the reticence of teaching staff and students towards the changes imposed by the transition from a traditional study programme to the one that includes PBL elements;
- the fear of losing control and fear of the unknown;
- the lack of knowledge tangential to PBL principles and practices both from teachers and students;
- the tendency to demonstrate that PBL works at least as well as traditional teachinglearning methods.

However, from the case studies presented in the book it can be seen that in most cases all these difficulties / barriers have been overcome through effective management and by learning from one's own mistakes and the mistakes of others, acquiring new knowledge from the experience gained.

The case studies presented in the book illustrate several attempts and errors made in the application of PBL. At the same time, the book also illustrates the changes that need to be made to promote adaptation to new learning-teaching methods. Of course, there are also mentioned situations of successful implementation of the PBL method in the study programme.

*The usefulness of the book* results from the fact that its users will be able to apply the knowledge gained from this reading when faced with a similar situation in their own implementation of the PBL method<sup>48</sup>.

The book "*Psychology for Psychologists: A Problem Based Approach to Undergraduate Psychology Teaching*" made an attempt to introduce a problem-based curriculum in teaching psychology. The book also provides information about the infrastructure needed to implement, evaluate and manage such a problem-based course.

Trends in education raise a growing emphasis on new teaching, learning and participatory learning methods. In this context, the book *Problem-based Learning Online* provides useful and current information on trends in the country's education system. The information presented in this book is very well systematized and treats, quite complexly, the problem of transition from face-to-face training to distance learning through ICT and PBL.

The book "*New Aproaches to Problem-Based Learning: Revitalising Your Practice in Higher Education*" is a complex collection of ideas, approaches, examples, behavioral patterns related to the use of PBL in higher education. It will facilitate finding many answers to questions that will surely appear in the process of applying the PBL method in local universities.

<sup>&</sup>lt;sup>47</sup> Problem-Based Learning: Case Studies, Experience and Practice/ edited by Peter Schwartz, Stewart Mennin and Graham Webb, p. 171

<sup>&</sup>lt;sup>48</sup> Problem-Based Learning: Case Studies, Experience and Practice/ edited by Peter Schwartz, Stewart Mennin and Graham Webb, p. 7

This book will allow teaching staff to explore new ways to involve students in the PBL method, avoiding some potential difficulties from the very beginning and being aware of certain risks.

General view of the sources analyzed can be summarized in the following conclusions:

- 1) The problem may be theoretical, practical, social, technical, symbolic-cultural and / or scientific and derives from the question of students within different disciplines and professional backgrounds. The problem is the starting point that directs the learning process of students and places learning in a context. A chosen problem must be exemplary. The problem may involve an interdisciplinary approach both in the analysis phase and in the solving phase.
- 2) Exemplarityy is a principle of selecting relevant learning outcomes and scientific content / knowledge that is exemplary to the overall learning outcomes. That is, a problem must relate to a certain practical, scientific and / or technical field. The problem should be an example or a specific manifestation of more general learning outcomes related to knowledge and / or research methods.
- 3) The team is a group that shares and collaborates closely in design, decision making, analysis and reflection. Compulsory cooperation of team members with regard to the successful completion of the project is an essential component of the global learning approach.
- 4) Students choose the problem-based and project-based educational model and, through this understanding, are able to successfully engage in order to achieve the educational objectives of the institution. In their work, students maintain an institutional culture of authentic collaboration, self-activation, mutual learning, and personal responsibility. The institution supports students in this regard by guiding and providing appropriate services.
- 5) Students are able to identify ways in which the problem-based approach and project-based approach shapes academic activity and successfully integrates its components as they reach broader institutional learning objectives as well as the objectives of the study programme. In their work, students demonstrate a high level of self-motivation and personal responsibility for learning.
- 6) Students possess and are supported in the development of powerful project management skills that allow timely completion of projects.
- 7) With the appropriate support of the institution, students are able to negotiate and successfully address the inevitable conflicts that arise in collaborative work. These skills are developed as part of the orientation of students towards problem-based and project-based model and are then supported, as appropriate, by faculty members and administrators. Clearly affirmed institutional policies identify the sphere and nature of the support available to students.
- 8) Students contribute to and maintain a strong collaboration culture that values active participation in the course and project work. Successful collaboration strategies on project activity are presented to students as part of their orientation experiences (i.e. courses and early projects). In their project groups, students formally or informally address the expectations regarding academic performance, patterns of work, and norms for

interpersonal relationships. Students show a high level of mutual support in their academic work.

- 9) Students play a significant role in managing study programmes. There are provided ways of communication for students' contribution to curricular development and implementation, semester topics, course offerings and academic policy, for instance by participating in managing the study programme or through systematic assessments.
- 10) Students actively participate in evaluation processes and institutional evaluation. Participation is characterized by a clear commitment to improvement, critical analysis and constructive feedback.
- 11) Students actively engage in substantial dialogue with faculty members about their coursework and application of knowledge in the context of their problem / project. This dialogue takes place in a collective atmosphere characterized by mutual respect and the genuine commitment of all those involved.
- 12) The role of theteacher-tutor is most often held by a faculty member, serving as a resource for groups of students involved in project work. Each group of students has one or more tutors for a project. The relationships between tutors and groups do not exceed the duration of the project. It means that a student (or a group of students) does not have a formal relationship over several semesters or several years with a particular tutor. In other educational contexts this type of role can be known as a counselor or facilitator.
- 13) Courses offered as part of a study programme that links directly to the theme, semester and project work of the students. Students choose to take a project course based on the relevance of the course to the work on the project. In some educational contexts, what is defined here as a course could be known as a subject.
- 14) Courses are required to be conceived as part of a study programme that introduces students to the concepts, theories, or fundamental abilities of a particular discipline. These courses are evaluated (examined) separately from the project courses and project work. In certain educational contexts, what is defined as a course could be known as a subject.

#### **3.1 METHODOLOGICAL FRAMEWORK**

The purpose of this report is to make a comparative analysis of problem-based learning in the partner countries of the European Union: Denmark and the UK and how to implement the method given in the University B.P.Hasdeu. For this purpose, a methodology has been developed. It aims at exploring the relationship between the internal structures of universities and the study programmes, including how the elaboration and support of the study programme are integrated across the university. The cohesion of the elaboration of the study programme with its support will be examined at different levels of the institution: the level of the system, the level of management of the university, of the faculty, as well as the level of the study programme. Also, issues related to the integration of groups of disadvantaged students as well as the available physical environment will be studied.

It is worth mentioning that a workshop organized in Chisinau from 19-22 January 2016, attended by representatives of the University of Aalborg (Erik de Graaf, Claus Spliid, Lars Peter Jensen), Denmark, as well as the representatives of six universities from the Republic of Moldova, including the State University, was of particular importance in understanding the essence of problem-based learning. Within this workshop were discussed in detail the features specific to the PBL method, the importance and necessity of introducing this method at the universities of Moldova.

In order to achieve favorable results, the research activity was structured in several stages, namely:

- Analyzing the literature and identifying the particularities of implementation and use of problem-based learning.
- Analyzing the institutional context of integrating the study programme (*Entrepreneurship and Business Administration*) at the University B.P.Hasdeu.
- Collecting and analyzing data derived from normative acts that directly or indirectly regulate the higher education system, statutes and other institutional acts of universities in Denmark and the UK.
- Performing a comparative analysis of the criteria, highlighting common points and differences between the three universities.
- Elaboration of a pilot study programme for the implementation of PBL methodology at the University B.P.Hasdeu.

### **3.2 DATA COLLECTION**

In order to collect primary and secondary data, study visits were made at the AAU University in Denmark and the UoG University in the UK. Also, the relevant information from the websites of the specified universities was used, the literature was consulted. Some details have been specified via e-mail. As a result of the study visits, reports were produced for each university by each person, and the materials, together with the analyzes, were used to prepare WP3. The purpose of this report is to make a comparative analysis of problem-based learning in the partner countries of the European Union: Denmark and the UK and how to implement the method given in the University B.P.Hasdeu. For this purpose, a methodology has been developed. It aims at exploring the relationship between the internal structures of universities and the study programmes, including how the elaboration and support of the study programme are integrated across the university. The cohesion of the elaboration of the study programme with its support will be examined at different levels of the institution: the level of the system, the level of management of the university, of the faculty, as well as the level of the study programme. Also, issues related to the integration of groups of disadvantaged students as well as the available physical environment will be studied.

#### **3.3 DATA ANALYSIS**

In order to collect primary and secondary data, study visits were made at the AAU University in Denmark and the UoG University in the UK. Also, the relevant information from the websites of the specified universities was used, the literature was consulted. Some details have been specified via e-mail.

Nr d/o	University visited	Period	People involved
1.	Aalborg University, Denmark	February 8-12, 2016	A. Popa L. Roșca-Sadurschi
2.	University of Gloucestershire, United Kingdom	February 29 - March 4, 2016	L. Roșca-Sadurschi S. Gîrneț
3.	Aalborg University, Denmark	November 7-18, 2016	L. Roșca-Sadurschi S. Gîrneț, Vulpe O., Noni L.
4.	University of Gloucestershire, United Kingdom	February 13-24, 2017	A. Popa L. Roșca-Sadurschi, Todos I.
5.	University of Siegen, Germany	April 10-16, 2016	Todos Irina Noni Ludmila
6.	KTH Royal Institute of Technology in Stockholm, Sweden	September 25-30, 2016	Popa A Vulpe Olesea

Table 2: Study visits to EU partners / universities

As a result of the study visits, reports were produced for each university by each person, and the materials, together with the analyzes, were used to prepare WP3.

# 4. BACHELOR'S DEGREE IN ENTREPRENEURSHIP AND BUSINESS ADMINISTRATION (BUSINESS AND ADMINISTRATION) AT THE STATE UNIVERSITY "B.P.HASDEU" OF CAHUL

#### 4.1 INTRODUCTION

The State University "Bogdan Petriceicu Hasdeu" of Cahul was established by the Government Decision of the Republic of Moldova no. 519 of June 7, 1999. Since 17.01.2003, following the changes made in the founding acts, the institution is named State University "Bogdan Petriceicu Hasdeu" of Cahul. Embedded in the structure of the education system of the Republic of Moldova, the University is identified by:

Nume - Universitatea de Stat "Bogdan Petriceicu Haşdeu" din Cahul; emblemă, sigiliu, antet propriu; sediu – Piața Independenței nr.1, Cahul, MD-3909, Republica Moldova, pagina web: www.usch.md. Ziua Universității se sărbătorește anual la 7 iunie.

Name - *State University "Bogdan Petriceicu Hasdeu" of Cahul*; emblem, seal, own header; headquarters - Piața Independenței, No. 1, Cahul, MD-3909, Republic of Moldova, web page: www.usch.md. University Day is celebrated annually on June 7.

In accordance with the Education Law Nr. 547-XIII of 21.07.95, the Law of the Republic of Moldova on the evaluation and accreditation of educational institutions in the Republic of Moldova nr.1257 - XIII of 07.16.97, and the Regulation on the evaluation and accreditation of educational institutions approved by the Law of the Republic of Moldova on the approval of the Regulation on the evaluation and accreditation of educational institutions no. 423-XIV of 06.04.99 in 2006, 11 specialties were evaluated at the State University "Bogdan Petriceicu Hasdeu" of Cahul, by the Department of Accreditation of Higher Education of the Ministry of Education of the Republic of Moldova. As a result of the evaluation, according to the Decision of the College of the Ministry of Education, no.14.8.1. as of November 30, 2006, the university was awarded the Accreditation Certificate no. 000127, AU series.

The State University "Bogdan Petriceicu Hasdeu" of Cahul operates under the *Law on Education no. 547-XIII of 21.07.95, the Education Code of the Republic of Moldova no. 152 of 17.07.2014, as well as other acts in force* regarding the scientific and methodological-didactic activity of the higher education institutions.

The teaching activity within the University is carried out in accordance with the legislation in force and is performed by **qualified teaching staff**: *university professors, associate professors, senior university lecturers, university lecturers, university assistants*. Starting with September 1, 2005, the education process in the university is organized according to the European Credit Transfer System (ECTS), so new educational plans for **the first cycle, Bachelor's degree studies**, were developed. The study programmes are authorized and operate according to the normative acts in force, correspond to the national qualifications framework.

The important changes that took place in the last 10 years are due to the Republic of Moldova's accession to the Bologna Process on 19 May 2005, the transition from 1 September 2005 to the cycles of university education and the application of ECTS. The approval of the framework plan has

led to the development of study programmes in the new format, which brings with it the further implementation of the transferable credit system.

The educational process within the USC is organized on years of study in the forms of education as follows: full-time education; part-time education; languages of instruction: Romanian, Russian.

### 4.2 System level

According to the normative acts in force, approved by the Ministry of Education, the external evaluation of the study programmes is not carried out by the higher education institutions.

The external quality evaluation activity for authorization of provisional functioning and accreditation of study programmes and institutions of vocational education and training, higher education and continuous training is carried out by the National Agency for Quality Assurance in Professional Education, hereinafter referred to as ANACIP.

The Agency is an administrative authority with legal personality autonomous to the Government, independent in decision-making and organization, financed from the state budget (2015-2016) and from own revenues. The Agency is a legal person, has a stamp with the State Coat of Arms of the Republic of Moldova and its name in Romanian, treasury accounts, financial and material funds.

The mission of the Agency is to develop and promote quality culture in the field of vocational education and training, higher education and continuous training, contributing to the enhancement of economic competitiveness and social cohesion in the Republic of Moldova.

The Agency shall be composed of:

- 1) Governing Board;
- 2) Profile Committees;
- 3) Administrative apparatus.

The Governing Board of the Agency is the collective governing body that assures the development and implementation of the Agency's strategy, it consists of 15 members: 13 staffs with scientific-didactic and scientific positions in higher education and vocational education and training or in research, one student representative and a representative of the business environment. The members of the Governing Board are selected through an open international competition, for a four-year term, with the possibility to be re-elected for a maximum one more term.

On April 13, 2016, at the Government meeting, the Methodology for external quality evaluation for the provisional authorization and the accreditation of the study programmes and of the vocational education and training, higher education and continuous training institutions, elaborated by the National Agency of Quality Assurance in Professional Education, was approved in accordance with the provisions of the Education Code.

In order to ensure the functionality of the Methodology, 8 External Quality Evaluation Guidelines for the evaluation of study programmes and vocational education and training, higher education and continuing education institutions were developed. These guidelines are intended to provide methodological support for the development of self-evaluation reports, containing process procedures and external evaluation steps, the outcomes of external evaluations and information on standards, criteria and evaluation indicators. By default, the Guidelines, through the standards they regulate, will set the minimum level required for provisional authorization and / or accreditation of study programmes and educational institutions, as well as benchmarks for the continuous improvement of educational services.

The information is available on the ANACIP website - www.anacip.md

The external evaluation for provisional authorization starts with the establishment of a new educational institution; changing the organization form of the educational institution; initiating a new study programme; other cases provided by the legislation in force, to prove the existence of resources, facilities and institutional structures.

The external evaluation for accreditation takes place after the first graduation for vocational education and training and higher education or at the end of five years of authorization for continuous training.

#### 4.3 UNIVERSITY MANAGEMENT LEVEL

#### The structure of the university

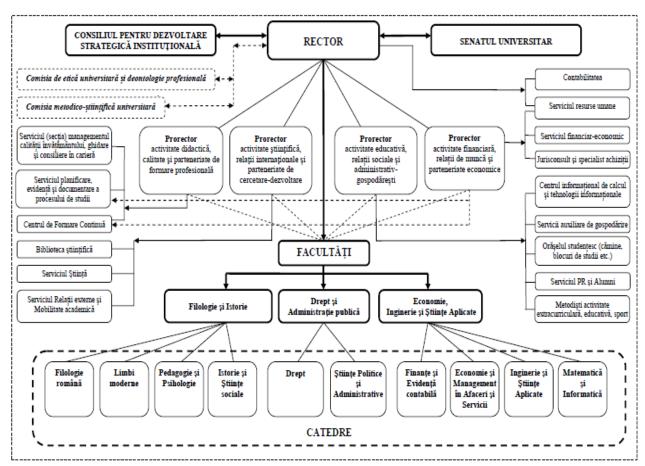
**The system of the governing bodies of SUC** consists of the Senate, the Council for Strategic Development of the Institution (CDSI USC), the Scientific Council, Faculty Councils, Administration Council and rector of the institution.

The SUC Senate represents the supreme collective governing body consisting of scientific, didactic and non-didactic staff, elected by the secret vote of the teaching staff of the faculties, departments, scientific centers, students elected by academic groups and student associations, representatives of the trade unions in accordance with the institutional regulation elaborated on the basis of a framework regulation approved by the Ministry of Education. The Rector, Vice-Rectors and the deans are ex officio members of the Senate.

The mandate of the Senate is 5 years, synchronized with the rector's term of office. The duration of the mandate of Senate members from among the students is one year, with the possibility of renewing the mandate.

The operative management of the University between Senate sessions is carried out by the **Senate Bureau** composed of the Rector, Vice-Rectors, Scientific Secretary of the Senate, with the support of the Administration Council.

#### Figure 1: The organizational structure of SUC B.P.Hasdeu



ORGANIGRAMA universității de stat "bogdan petriceicu hasdeu" din cahul

The Council for Institutional Strategic Development of the University is the dual governing body, which brings together the representatives of the academic community, on the one hand, and the representatives of the Founder, Ministry of Education, Ministry of Finance, as well as external experts, on the other hand, in order to ensure the achievement of the university autonomy under the conditions of public accountability established by the Education Code.

*The governing body of the faculty in the SUC* is the **Faculty Council**, which is elected for a term of 5 years. The duration of the mandate of the members of the Faculty Council from among students is one year, with the possibility of renewing the mandate.

The Rector exercises the *Executive Management of the University* and is responsible for organizing and carrying out the entire activity of the University, for strict observance of discipline and legislation by staff and students.

In the direct subordination of the rector there are organized and operating: a) the Rectorate (the Vice-Rectors, the Scientific Secretary of the Senate); b) SUC Chancellery; c) the Secretariat of the Rectorate; d) Human Resources Service; e) Legal (Legal Advisor) and Public Procurement Department; f) Planning and Finance Service; g) Accounting; h) Information and Communication Service; i) SUC's Publishing House; j) SUC's Typography, other functional administrative units of the university management level.

#### The mission

The State University "Bogdan Petriceicu Hasdeu" of Cahul assumes the general mission of scientific research and education, generating and transferring knowledge to society through:

- a) creating, preserving and disseminating knowledge at the highest level of excellence;
- b) scientific research, development, innovation and technology transfer, through individual and collective creation, as well as the valorisation and dissemination of their results;
- c) training of highly qualified specialists on the national and international labor market;
- d) creating lifelong learning opportunities;
- e) preservation, development and promotion of cultural-historical national values in the context of cultural diversity.

SUC assumes its own catalyst mission in the development of society in general and in the southern region of the Republic of Moldova in particular by creating an innovative and participative scientific and learning environment, transferring competencies and knowledge to the community through education and consulting services that it offers to partners from the economic and socio-cultural environment.

The accomplishment of the USC mission is materialized in:

- a) the organization of higher education programmes, including educational and scientific research activities, provides training in an academic or professionally advanced field, in accordance with the normative framework in force.
- b) the initial and continuing training of qualified and highly qualified human resources;
- c) promoting advanced scientific research;
- d) developing the critical thinking and creative potential of the members of the university community;
- e) the creation, hoarding and spreading the values of human culture and civilization;
- f) promoting multicultural and plurilingual interferences;
- g) the assertion of national culture and science in the world value chain;
- h) the development of society within a rule of law, free and democratic state.

The mission of the State University "Bogdan Petriceicu Hasdeu" of Cahul is in line with the legal framework and is oriented towards the integration of the institution into the unique European educational area, being a regional center for the provision of educational and academic services that meets the demand for specialists and innovative products for organizations and communities in the southern part of the Republic of Moldova.

#### University objectives

The University is a scientific and cultural center of continuous training, whose main purpose is to promote the educational policy of the Republic of Moldova and ensure the quality education process, the development of a democratic, humanistic, flexible and transparent university education based on the values of culture and of national and universal science, achievable by:

- *promoting* the Bologna Process and strengthening the implementation of ECTS, SNCS, targeting the efforts of university teachers towards achieving quality, this being the

characteristic feature of university activity that is geared towards meeting society's expectations;

- *providing* localities in the southern part of the country with highly qualified staff both for the positions of teachers in gymnasiums, general education schools, high schools and for various fields of production, culture or administration; contributing to the personal opening of students and teachers; the formation of the own innovative and creative personality, initiative in thinking and solving new socio-economic problems etc.;
- *formation and achievement of general competences* related to: *knowledge and understanding* (knowledge and proper use of the notions specific to the discipline); *explanation and interpretation* (explanation and interpretation of some ideas, projects, processes, and the theoretical and practical content of the discipline); *implementation (designing, conducting and evaluating specific practical activities);* the use of some investigative and implementation methods, techniques and tools; attitudinal skills (manifestation of a positive and responsible attitude towards the scientific field); cultivating a scientific environment centered on democratic values and relationships; promoting a system of cultural, moral and civic values; optimal and creative valorisation of own potential in scientific activities; participation in own professional development;
- *continuous professional training* of human resources through various ways (participation in conferences, seminars, academic mobility of students and teachers, etc.), post-graduate studies, elaboration of analytical programmes, support for courses, etc., formation of flexible behavior, adaptable to new socio-economic conditions;
- organizing didactic activities in the spirit of democratic values, academic standards and freedom, openness towards didactic-scientific integration in the national and international university community in the spirit of European culture and civilization; continuous promotion and modernization of teaching technologies and strategies and modern assessment technologies to help transform students into active subjects of their own becoming and intellectual, cultural and moral personality training; defending the basic principles of democracy;
- *performing* fundamental and applied scientific research for the national economy so that specialists will have modern technologies in scientific investigations; the dissemination and implementation of the results of scientific research, of the contemporary educational technologies in order to facilitate the solution of the problems of education, science, entrepreneurship etc.;
- *improving the analytical programmes* for the continuous training and formation of the specialists in all specialties of the university, targeting them on competences and not on content, with concrete indication of the tasks of the individual activity of the students in each discipline;
- *the activity of the Center for Continuing Education* where educational and counseling services are provided to teachers in pre-university education from the southern districts of the republic. Through its activities, the *Center for Continuing Education* promotes the concept of learner-centered education, changing the emphasis in the educational instructive process on the studen as an object of subject education, an active participant of his / her own becoming as a personality;

- *organization of Master's degree studies*, collaboration, in the forms authorized by the legislation in force of the Republic of Moldova, with other related organizations and institutions in the Republic and abroad.

An important aspect of the organization of the instructive-educational process within the university is the assessment of the results of the educational process etc. The evaluation allows to see to what extent the objectives were achieved: the educational plans and the content of the analytical programmes, which knowledge, abilities and skills were acquired by the student. Estimation is made in a number of ways: evaluation of the organization of the teaching process, assessment of the activity of the academic staff, and assessment of the students' learning activity, in the light of the evaluation regulations on teachers activity and the student learning activity from the perspective of the student-centered education.

#### Quality management system

The QMS contains references to the responsibility of the university management, how it assumes this responsibility by defining and pursuing its strategy, quality policy and objectives, providing the resources needed to achieve it, institutionalizing the activities of the institution to meet the requirements and expectations of the internal and external stakeholders, the creation of an environment in which the whole staff is encouraged to perform, assuming individual responsibility for fulfilling its mission and objectives, identifying, keeping under control and continuously improving the processes carried out in the institution, introducing some mechanisms for internal evaluation of performance on all dimensions of the activity, so that the existing non-conformities can be corrected and the possibilities for improvement are implemented.

Considering the university as a complex system consisting of faculties, chairs / departments, sections, library, the management of the State University "B.P.Hasdeu" of Cahul carries out a systemic approach to quality management. Each faculty / section / department has a well defined status and constitutes an entity within the quality management system, being characterized by functional links with other entities and systems. This approach allows the management to be involved at all levels in the continuous implementation and improvement of QMS, by understanding customer needs and acting for meeting them.

The process-based approach to the implementation of the quality management system involves the following activities:

- identifying the processes necessary to obtain the desired result;
- establishing succession and interaction of processes;
- identifying the interactions between the processes and the functional structures of the institution;
- establishing methods for tracking, analyzing, controlling and improving performance;
- continuous improvement according to the PDCA cycle (*Plan Do Check Act*).

The management of the State University "B.P. Hasdeu" of Cahul is the one that sets its policy on the quality of studies and teaching. The University management is responsible for the overall quality of operations and results. The dean of the faculty, the heads of the department are responsible for the operational and qualitative results of their own units. These include planning (developing procedures, specific regulations), monitoring and continuously improving the quality of education and research processes, the use of related resources in these sectors; Quality Management Section / Study Section that has the mission to implement, coordinate and monitor the functioning of the quality management system at university level.

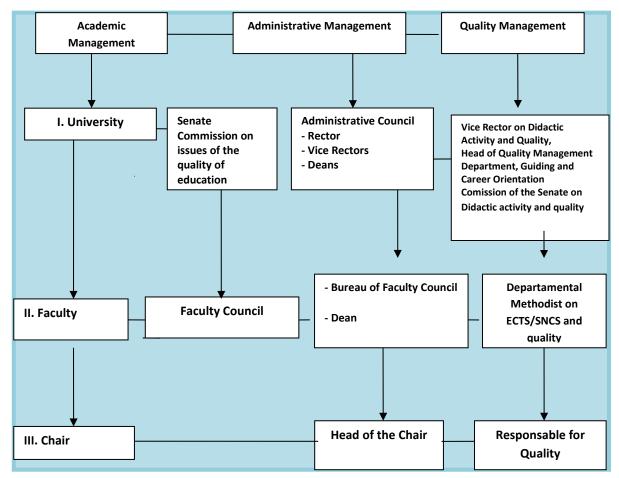


Figure 2: Quality Management System at SUC B.P.Hasdeu

4.4 FACULTY / DEPARTMENT LEVEL

The *faculty* is the basic teaching, scientific and administrative functional unit of the SUC, which operates in accordance with the SUC Charter and Instructions (regulations, decisions, orders / provisions), as well as regulatory acts of the Ministry of Education and the provisions of the legislation in force.

The faculty aims at organizing and carrying out the instructive-educational process, performing the methodical, educational and scientific research activities for one or more domains / specialties.

The Faculty has the following tasks:

- *a) training of qualified personnel through higher education (Bachelor and Master's degree studies);*
- *b)* coordinating the didactic and research activities of chairs / departments and other subdivisions, and implementing their results;

- *c) training of specialists through full-time education, part-time education, distance learning, individual studies and continuing professional training programmes;*
- *d)* ensuring the quality of studies and scientific research.

A faculty may include several chairs / departments, methodical-practical centers, scientificdidactic laboratories and other subdivisions that are responsible for organizing study programmes by types and cycles of university studies, and conducting research activities.

The organizational structure of the faculty is flexible, being determined by the strategy of the majority of the members. The activity of the faculty is regulated by the Regulation of the faculty, approved by the SUC Senate, and the provisions of the University Charter.

The faculty, through the decision of the faculty council, establishes its own mission and strategic objectives, based on the general mission of scientific research and education and the strategic objectives assumed by SUC through the University Charter, and adopts the Annual Activity and Development Plan of the Faculty, based on the institutional strategic development, approved by the University Senate.

The *chair / department* is a fundamental structural subdivision of the SUC, which operates on the basis of the legislation in force, the University Charter and the SUC instructions.

The chair / department is the functional academic unit that ensures the production, transmission and valorisation of knowledge in one or more specialized fields, and aims at organizing and carrying out at a high level the didactical and scientific, methodological and consultative activities at one or more related course units. The department usually provides several study programmes (specialties).

The chair / department has the following tasks:

- *a) the design, organization and realization of the didactic process;*
- *b)* organizing the scientific researches of the teaching and scientific-didactic staff and of the students of the 1st-2nd cycles of higher education;
- *c) evaluation of the didactic, methodological and research activities of the teaching and scientific-didactic staff and the students of the 1st-2nd cycles of higher education;*
- *d) methodological assurance of the didactic process;*
- *e) ensuring the quality of studies;*
- f) providing students with educational activities.

The chair / department may comprise methodical-practical centers, scientific-didactic laboratories, workshops, in-depth extracurricular study centers (including legal clinics, resource center for psychological health, etc.) - aimed at deepening the learning process.

The chair / department develops its own teaching and scientific-didactic staff positions, as well as scientific and technical staff.

With regard to the didactic aspect, the chair / department is a complex structural unit that assures the totality of didactic activities (lectures, seminars, practical and laboratory workshops, internships, individual guidance of students) and includes university professors, associate professors, university lecturers, assistant lecturers, PhD students and technical staff in the number and proportion that allows for the optimal realization of the didactic process.

The staff structure of the chair comprises, as a rule, 10-30 didactic and scientific-didactic positions.

Chair / department responsibilities:

- a) participation in the elaboration of training concepts at different levels of education or at different course units (disciplines), as well as in drawing up curricular documents of the study programmes (educational plans, curriculum of the specialized programme and the files of the discipline, etc.);
- b) promotion at a high scientific-methodological level of the fundamental courses, special courses, seminars, practical and laboratory works;
- c) organizing and conducting the scientific researches of the didactic and scientific-didactic staff and of the students of the 1st-2nd cycle of higher education;
- d) implementing the research results, including in the didactic process;
- e) organizing internships for students;
- f) organizing the individual work of the students;
- g) organizing the current and final assessments of the course units and completion / final assessments according to the educational plan;
- h) conducting the process of elaboration and defence of the students' annual, Bachelor and Master's degree theses;
- i) informational and methodological assurance of the teaching process: elaboration of methodological recommendations, didactic materials, textbooks, dictionaries etc .;
- j) carrying out scientific researches under projects or by order, on a contract basis, etc., according to the scientific activity plans of the chair / department and the individual activity plans of the teaching and scientific-didactic staff;
- k) examination of doctoral theses, habilitate doctor's thesis presented at the faculty, etc.;

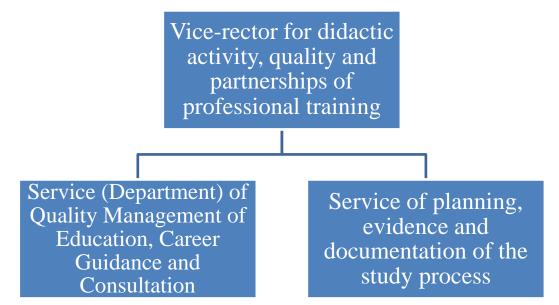
The executive management of the chair / department is carried out by the head of the chair / department who is elected in accordance with the Regulation on the organization and functioning of the governing bodies approved by the University Senate on the basis of the University Charter and the legislation in force.

The activity of the chair / department is regulated by the Chair / Department Regulation, approved by the SUC Senate, and the provisions of the University Charter.

The chair / department establishes its own mission and strategic objectives, based on the overall mission of scientific research and education, and the strategic objectives assumed by the SUC through the University Charter, and adopts the Annual Work Plan of the chair / department based on the institutional Strategic Development Plan, approved by the University Senate, and the Annual Activity and Development Plan of the Faculty.

### 4.5 STUDY COUNCIL LEVEL

Within the SUC, the functions, duties and responsibilities of the staff involved in the teaching, learning and management process as well as the existing relationships are determined by the existence of a well-defined and determined organizational structure, relations expressed in the **organizational chart**.



*The Service (Department) of Quality Management of Education, Career Guidance and Consultation* is the administrative functional unit that:

- a) ensures the implementation of quality standards within the SUC;
- b) makes proposals for improvement of the evaluation activity and quality assurance in accordance with national and European standards;
- c) carries out quality audit programmes at SUC, faculty and department level;
- d) provides the necessary information for the quality assessment in SUC and publishes reports on quality assurance in SUC;
- e) provides concultancy and guides the self-evaluation activities and follow-up selfevaluation reports in accordance with national reference standards and requirements established by the National Agency for Quality Assurance in Professional Education or another quality assessment agency registered in the European Register for Quality Assurance in Higher Education;
- f) provide career guidance and career counceling to SUC students and graduates as well as other members of the academic community;
- g) other activities specific to its area of responsibility.

The *Service of planning, evidence and documentation of the study process* is the administrative functional unit that ensures:

- a) planning of the study process schedules, study formations, teaching positions;
- b) recording students' quota;
- c) issuance of draft orders on students promotion, graduation, expell, transfer, etc.;

- d) issuance of documentation of interest to central and local public authorities, and specialty public authorities / bodies / services;
- e) documentation of students and graduates;
- f) keeping documentation related to admission, study process and academic achievement;
- g) issuance of study documents (diplomas);
- h) other activities specific to its area of responsibility.

The training of specialists in this field is done in accordance with the study programme that is materialized in the educational plan, the university curriculum, the organization of the students and the teaching staff, the academic quality assurance system.

### Educational plans

One of the basic elements of the training process is the Educational Plan, a regulating document, which reflects the general and reference objectives of the content of the education for a specific specialization. It represents a unitary view of the whole teaching-learning-evaluation activities and their achievement over time in order to train a highly qualified specialist.

The current educational plan for the BA study programme focuses on the following objectives:

- a) *the general objective:* to cultivate the personality of the students according to the general human values;
- b) *special objectives:* to develop / train skills, capacities and attitudes according to the chosen theoretical and applied domain and the specialization objective; orientation of students towards fields that capitalize the general and particular background of specialization sciences;
- c) *concrete objectives:* to master the fundamental concepts and strategies required in the requested field, which offer the possibility of professional integration.

Having as a major objective the training of a specialist able to structure and perform a wide range of activities, the university trains students, according to the necessity of the regional economy, to the imperatives of time.

The content of the educational plan is in accordance with the mission and objectives of the BA study programme, as well as its temporal, formative, accumulation and evaluation dimension. The coherence between the learning outcomes of the learning process and the objectives of the educational plan was proven by: the logic of organizing and ranking university subjects integrated into the educational plan; analyzing the relationships between the fundamental, general and special disciplines, with openness to practice; analyzing the existing links between compulsory, optional and free choice disciplines; the connection between the deepening of the specialty and the thickening of the common trunk of the general and special subjects.

Improvement of educational plans is a continuous process. Admission to new specialties, the imperatives of the Bologna process, require the revision of existing plans and the development of new projects. The updating of the educational plan is carried out in the following ways: updating of the studyprogrammes; introduction of new optional and free choice subjects; modifying the educational plans in accordance with the requirements of the Ministry of Education.

The members of the chair actively took part in drawing up and updating the plans. At the suggestion of the chair, of the methodological committee, the educational plans have undergone qualitative changes. The review of the structure and content of the new plans was made in the light of the current requirements for the training of specialists who should withstand the conditions of market competition, with the decrease of the number of hours in some disciplines, the decrease of the number of groups, etc.

#### Curricular programmes

Considerable work was done by the department's staff in the elaboration of the curricular programmes according to the European standards, where there were clearly reflected the reference objectives of the discipline and the outcomes of the course; teaching-learning-assessment methods; benchmarks on the content of courses and seminars; requirements regarding the student's portfolio; systems and tasks for the individual work of the student; the bibliography provided for the course and seminar.

In the curricular programmes there are indicated the subjects for the courses, seminars, a special space is reserved for the individual work with the students in accordance with the objectives set in this context. Bibliographic sources must be indicated in order to perform the individual work.

The curriculum of the discipline or the curricular programme is the regulatory document at the level of a university discipline. In this respect, the disciplinary curriculum can be regarded as a standard of learning within a concrete discipline.

#### The teaching-learning-assessment process

As a practical and dynamic dimension of the education system, the educational process represents the specific context in which the training takes place. As the main subsystem of the education system, the educational process ensures: the design of the general and specific objectives according to the criteria established at the level of the outcomes; the organization of the training content in order to achieve certain teaching and learning goals, evaluated at different time intervals; the methodological realization of the didactic activity; the evaluation of the results at different time intervals, at the beginning and end of the activity and throughout it. The education process is carried out according to the educational plans.

#### Didactic strategies applied in the educational process

In order to develop the competencies necessary for the students through achieving the set up objectives, the teachers use different didactic strategies depending on the specificity of the taught course: inductive strategies, whose teaching approach is from the private to the general; deductive strategies (inverse to inductive ones): from general to particular; mixed strategies: inductive - deductive and deductive - inductive; algorithmic strategies: explicative demonstrative, intuitive, programmed and algorithmic ones; strategies for the development of knowledge through his / her own efforts of thinking, etc.

Teachers design student-centered learning environments with less emphasis on the traditional responsibility to transmit information only. In this respect priority is given to the active-participatory

methods meant to transform the student from the object into the subject of learning and his / her own professional becoming. Among the interactive methods most often applied by the teachers we can mention: clustering, gallery tour, SWOT technique, Venn Diagram, Brainstorming, Method 6-3-5, Philips 6/6, case study, Think - Pair - Present, rotating communication, cube technique, problem-solving, simulation, hypothesis formulation, role play, case study, etc.

# Use of information technology in the training process (e.g. e-mail, personal webpage, electronic resources, etc.)

In order to diversify the methods of teaching and facilitate communication with students, technical means are used in the teaching process, the courses are presented in PowerPoint format. Attempts are being made to teach online courses. Audiovisual means, interactive boards, internet sources, web pages and also the MOODLE platform are used in the teaching of some disciplines.

#### Organizing and conducting students' individual work

Designing and organizing the individual work of the student for the acquisition of the necessary competences in the subject matter is an important structural component of the curriculum by subject. We believe that it is necessary to train, educate academic autonomy and the culture of the student's individual work in auditors, laboratories, libraries, and cultivate their responsibility for studies, for the results obtained. *Students' individual work* is done through various interactive forms guided by the teacher: the individual study of some themes, which complements the basic content of the subject, analyzes and case studies, essays, portfolios, problems / tasks design and solving, individual scientific research activities; analysis and synthesis of scientific papers, simulations and many other activities.

The ratio of the number of direct contact hours between the teacher and the student and the individual work is 1: 1 or 1: 2 in the first cycle, Bachelor's degree studies, and 1: 3 in the second cycle, Master's degree studies.

#### Internships

Internships are a component part of the educational process that ensures the realization of the fundamental principles of the initial professional training process and dynamic of the act of acquiring professional behavior. They represent the interference between the study process and the professional activity, are a first proof of adaptation and integration in the professional field. The activity of conducting the internships by BA students took place in accordance with the educational plans, as well as the Regulations for organizing and carrying out the didactic process in the higher education institutions of the Republic of Moldova and the Regulation regarding the internships of the students of the State University "B. P. Hasdeu" of Cahul.

The assessment method is the exam, where the students submit and present their internship dossier which is assessed by the internship supervisor at the chair, taking into account the assessments of the tutors from the institutions where the internships took place. Subsequently, a commission is formed in which the students have to take an exam on the internship performed.

#### Assessment of students learning activity

Assessment of learning outcomes is done in accordance with the Regulation on Assessment of Student Learning Activity. The form of assessment for each discipline is stipulated in the educational plan, and the way (oral or written) is decided by the chair. Each teacher announces at the beginning of the courses how the evaluation of students activity will take place. Students are informed about the number of credits granted for the subjects they are studying and about the conditions of graduation according to the Regulation for organizing studies in higher education based on the National System of Study Credits, displayed in the notice and published on the university's website.

For the systematization and improvement of the process of assessment of the student learning activity in each semester of study, two current mandatory assessments are being organized in the weeks 5-7 and 10-12, according to the current evaluation schedules, and the final evaluation is carried out at the end of the semester.

Among the assessment methods used by the departments during the current and final evaluations can be mentioned: the test, the report, the oral communication, the portfolio; docimological tests that were used both in formative and summative assessments, control papers, abstracts, essays. Various types of seminars are also organized: seminar-conversation, seminar on a report basis, situation simulation seminar, round table seminar, practical seminar, etc.

Each programme is monitored by a Programme Director.

#### 4.6 INTEGRATION OF STUDENTS WITH DISABILITIES

The University does not have a center / office specifically dedicated to disabled students, which is why there are no specific responsibilities for teaching staff and management staff, and there is no allocation of resources in that direction. However, within certain limits the institution focuses on the positive solution of the respective problems by creating access to the institution (special ramps), the appointment of persons as "Supervisors on specialties", who have the task of guiding, helping students of the targeted specialties. In order to facilitate the teaching-learning process, the institution has some classes equipped with modern teaching technologies that facilitate access to information for people with disabilities and the disadvantaged ones. For the support of the above mentioned people the so-called social scholarships that students can receive by applying to and completing special forms are provided in the university.

For people with severe disability, but which allows them to perform studies and practice in the chosen specialty, SUC applies the Law of the Republic of Moldova<sup>49</sup> nr. 60 of 30.03.2012. According to the Regulation for the organization and conduct of admission to higher education (first cycle) in the State University "B.P. Hasdeu", these persons are eligible under paragraph 9b and are included in the 15% share of the study places financed by the budget of the state.

#### 4.7 PHYSICAL ENVIRONMENT

At present, the Faculty of Economics, Engineering and Applied Sciences has rooms in Block no. 2, seven equipped laboratories that provide teachers and students with computers, projectors, interactive boards, teaching materials. There are also arranged teachers' rooms, classrooms / seminar

<sup>&</sup>lt;sup>49</sup><u>http://usch.md/wp-content/uploads/2015/12/Legea-Republicii-Moldova-nr.-60-din-30.03.2012-privind-incluziunea-social%C4%83-a-persoanelor-cu-dezabilit%C4%83%C8%9Bi.pdf</u>

rooms with all the facilities necessary for conducting didactic and scientific research in good conditions.

Depending on the teaching, research and administrative objectives, SUC has educational and research facilities that comply with safety principles and hygiene requirements in terms of the quality of surface, equipment, technical condition and amount.

The direct organization and management of the training process under the *Business and Administration* study programme is carried out at the Faculty of Economics, Engineering and Applied Sciences of the University. Students have classes in the study block no. 2, located at: Cahul, Dunării Street, 19. The *Information Bibliographic Service, the University Center for Continuous Training; Career Guidance and Counseling Center; the English Language Resource Center; the French Language Resource Center, the German Language Resource Center, the Informational Center for Computing and Information Technologies; the Psychological Counseling Center, the Pro-Europa Center in Cahul; the Romanian Culture and Civilization Center; 2 speaker cabinets located in Block no. 1 etc.*, are also available to the students.

The main concern of the SUC related to the Library is to bring it closer to standards existing in university libraries; this objective is included in the Institutional Development Strategy 2012-2016<sup>50</sup>, approved by the Senate of the State University "B. P. Hasdeu" of Cahul, Minutes no. 6 of 10 May 2012.

The *home loan room* holds a collection of Romanian and Russian documents from all fields of study and research. The members of the university community have access: students, master degree students, PhD students, teaching staff, auxiliary staff, *registered* at the Library, who can borrow at home for a limited period of time.

SUC also has a *multimedia room* that aims at creating, storing and developing electronic information resources in the field of science, education, and culture, as well as promoting access to them. It is equipped with 7 high-performance computers, internet connection. The functionality of this multimedia room is the following: Internet access; ensuring access to the databases of EBSCO, MoldLex; consulting EBSCO CDs from the center's collection.

The *periodicals room* offers for consultation the current and retrospective editions of periodicals: collections of newspapers, magazines, yearbooks, etc. The publications are from various fields of interest: philology, history, law, culture, economy, entertainment, and so on. It provides free access to the shelf for the latest newspapers: "Capital market", "Economist", "Экономическое обозрение", "Timpul", "Făclia", and journals: Economica, Intellectus, Monitorul fiscal FISC. md, Consultant, STUDIA Universitatis Moldaviae, Contabilitate și audit, *Buletinul științific al USC*, etc. The University Library is subscribed to 32 titles each semester, of which 19 current journal titles and 13 titles of current newspapers, 30 titles being in the state language.

*The following databases can be also accessed in the Library of the State University "B.P.Hasdeu" of Cahul:* <u>EBSCO</u> - one of the most renowned traditional and electronic journal subscription agencies. EIFL directly provides about 18,000 magazines, newspapers and newsletters with full text. EBSCO databases can be accessed in Multimedia Rooms.

<sup>&</sup>lt;sup>50</sup><u>http://usch.md/wp-content/uploads/2015/11/Strategia-USC.pdf</u>

MoldLex - legislative database containing legal acts with normative character published in the Official Gazette of the Republic of Moldova in Romanian and Russian languages. The MoldLex database allows printing or copying of legislative documents on different information carriers.

SpringerLink - covered areas: architecture and design, economics, chemistry, materials science, computer science, environmental science, engineering, humanities, social sciences, law, mathematics and statistics, medicine, physics and astronomy, applied informatics.

The library provides students with books that have been acquired, especially in recent years. To these are added the textbooks and specialized books edited by the teaching staff of the chair, the concern for generating modern related information is slightly increasing.

#### 4.8 **STUDY PROGRAMME LEVEL**

University study programmes within the USC are structured on study cycles, in accordance with the Education Code and the Framework Plan for Higher Education approved by Order of the Ministry of Education no. 445 from 03.06.2011<sup>51</sup>. In the process of designing the educational it was taken into account the Nomenclature of professional training areas and specialties <sup>52</sup>, the National Qualifications Framework<sup>53</sup>, the European Qualifications Framework.<sup>54</sup>

In 2015, according to the Order of the Ministry no. 1045 of 29.10.2015 the new Framework Plan for Higher Education 55, was implemented, thanks to which the Department of Economics and Management in Business and Services, which provides the Business and Administration study programme revised and modified the study plan according to the new requirements.

In the design process, the department is the initiator of the new study programmes. Taking into account the development strategy of the faculty, of the institution and the labor market situation, the initiator formulates the need to start the new study programme.

Therefore, the educational plan of the "Business and Administration" study programme was developed by the Department of Economic Sciences in 2005, after the study programme in the specialty 1802.01 "Management of the company" was accredited. Subsequently, the Department of Economics and Management in Business and Services, in accordance with the Framework Plan of June 3, 2011, developed a new educational plan for this programme, which was approved at the Chair's meeting, at the Faculty Council Meeting and at the Senate Meeting, and coordinated with the Ministry of Education. Then, the educational plan for the "Business and Administration" study programme was revised and amended in 2016. When drawing up the educational plan, the provisions of the National Qualifications Framework were taken into account, so that the educational plan ensures the obtaining of the qualification, according to the requirements specified in the NQF, namely: the obtained qualification, the skills trained, and so on.

 <sup>&</sup>lt;sup>51</sup> <u>http://usch.md/wp-content/uploads/2015/12/Plan-cadru-pentru-studii-superioare\_2011.pdf</u>
 <sup>52</sup> <u>http://usch.md/wp-content/uploads/2015/12/Lege\_Nomenclator\_domenii-formare.pdf</u>

<sup>53</sup> http://edu.gov.md/ro/content/cadrul-national-al-calificarilor-0

<sup>&</sup>lt;sup>54</sup> http://usch.md/wp-content/uploads/2015/12/ISCED-2013 domenii-de-educatie.pdf

<sup>55</sup> http://usch.md/wp-content/uploads/2015/12/ordinul\_nr.\_1045\_din\_29.10.2015\_plan-

cadru\_pentru\_studii\_superioare\_ciclul\_i\_-licenta\_ciclul\_ii\_-master\_studii\_integrate\_ciclul\_iii\_-doctorat.pdf

The plan contains several optional subjects, continuously, depending on the dynamic evolution of the field, so that each student has the opportunity to assimilate the knowledge he / she wants, correlated with market requirements.

The list of compulsory and optional course units / modules, the number of hours to study them, the types of internships and the free-choice course units have been established according to the specifics of the general field of study (*36. Economic sciences*), the field of professional training (*363.1 Business and Administration*) in line with the National Qualifications Framework and the European Qualifications Framework. The correlation between the number of hours and credits corresponds to the provisions of the Framework Plan.

When drawing up the educational plan the main objectives of the Framework Plan were taken into account: *general, specific and concrete*. The training under the "*Business and Administration*" study programme takes place in accordance with the Educational Plan, for the 3-year form of education (based on high school, secondary and higher education), registration number *IS-01-1726* of 20.02.2012.

In the plan the fund of hours (course, seminar, practical works) for each discipline and internship is planned. The correlation between course, seminar, direct contact and individual work is 1:1, which corresponds to formal and formative requirements. The year of study is divided into 2 semesters with a brief duration of the 30-week study process, including internships, which is an important stage in the training of specialists.

The use of the ECTS / SNCS system in combination with the requirements set out in the National Qualifications Framework favors the transparency of the learning process and the qualifications obtained within the "*Business and Administration*" study programme and facilitates the recognition of the qualifications obtained.

The educational plan provides for the student to undertake course units / modules from: **a**) *the fundamental component (code F)*, which aims at acquiring knowledge and forming basic skills, integrated into competencies, allowing the scientific approach of the field of professional training, as well as the understanding and creation of new knowledge; **b**) *the component of general skills and competences (code G)*, which aims at developing the skills to learn, research, analyze, expose, communicate effectively orally and in writing, including through information technologies, in the field of professional training and in various cultural contexts; **c**) *the socio-humanist orientation component (code U)* aims at forming a broad horizon of legal, philosophical, political, sociological, psychological and economic culture that would enable the future specialist to assume responsibilities in a free society and to adapt efficiently and effectively to changes in society.

#### The forms of organizing the teaching-learning process

In accordance with art. 47 of the SUC Regulation for the Organization of Studies in Higher Education based on the National System of Study Credits (approved by the SUC Senate, Minutes No. 06 of 21.04.2016), the academic year consists of two relatively equal semesters, which include two exam sessions, internships and two holidays. The duration of a semester is 15 weeks of direct contact with the students.

Within the SUC, the teaching-learning-assessment process is carried out according to the Educational Plan elaborated on the basis of the National Qualifications Framework. Full-time

courses are traditionally organized for higher education, according to the educational plans, which provide for the following teaching activities: course, seminar, practical works. The module / discipline can be assimilated by performing the following educational activities: attending the theoretical course / lectures, seminars, performing specific tasks; training abilities in the laboratory; consultation of documentary sources, including information from the Internet; writing reports, theses; performing case studies (individually or in groups); reading books and notes, etc. For independent activity, the educational plans also require students to produce different individual papers: annual theses, reports, portfolios, and so on.

The individual work of the student admitted to this specialty involves: research activity; writting the annual and bachelor's degree thesis; solving various case studies and many other activities organized and evaluated by teachers. The individual teacher-guided study is included in the teaching process and forms part of the student's workload per week in addition to the number of direct contact hours included in the educational plan. The individual teacher-guided study of the student is part of the teacher's didactic workload, carried out in the second half of the day and not covered by hours in the didactic workload performed in the classroom.

The individual teacher-guided study is provided for all course units / modules in the educational plan.

In order to conduct a student-centered education, the members of the departments apply at the seminar the following teaching-learning methods: <u>communication</u> (discussion lecture, debating lecture, heuristic conversation, explanation, problem-solving, intuitive demonstration, etc.); <u>explanation, action-based</u> (practical and applicative works, case study, exercises, simulation of situations, tests, individual activity based on bibliographic material).

Interactive methods are also used: Clustering, SWOT - problem approach, Brainstorming, Method 6-3-5, Philips 6-6, rotating communication, etc.

In the process of organizing and conducting seminars there is contribution to the development of students' creative, critical, creative and active thinking abilities. Various types of seminars are used: seminar - conversation, seminar on a report basis, seminar - situational simulation, practical seminar, seminar - round table, repeating seminar, problematic seminar, synthesis.

The organization and conduct of internships is grounded in accordance with the Framework Regulation on Internships in Higher Education and the SUC Regulation on the organization and conduct of internships. Types of internships are determined in the educational plans in strict compliance with the learning outcomes for the specialist in the respective field of training and they include:

- *a) specialty (initiation, production);*
- b) Bachelor's degree internship.

Assessment forms include exams, intermediate assessments, and annual theses. The form of assessment is provided in the educational plan, and the verification modalities are set in the disciplinary curriculum and approved at the departments' meetings, endorsed at the faculty council. For all disciplines, 1-2 current assessments are scheduled, which are reflected in the staudy programmes and are carried out during the semester. For all disciplines provided in the educational plan, the final assessment form is the exam, except for Physical Education whose form of assessment

is "admitted / rejected" mark. Exams are only held in the examination sessions, according to the study process schedule approved by the SUC Senate.

The bachelor's degree examination consists of two tests: Integrative exam (including fundamental and specialty disciplines) and public defence of the bachelor's degree thesis.

Students are involved in the teaching process, answering questionnaires regarding the quality of the study programme. There are and are applied assessment questionnaires by students of all teaching staff and of the courses / seminars taught, which are applied in accordance with the *Regulation on Quality Assessment of Teaching and Scientific Staff*.

Students involved in the governing bodies of the faculty and the university, being elected as members of the Senate, faculty council, participate in making decisions to modify, modernize curricula and teaching-learning methods.

#### 4.9 LEVEL OF PEDAGOGICAL TRAINING

The planning, recruitment, employment and administration of academic staff in the SUC takes place in accordance with the Labor Code, the Education Code of the Republic of Moldova, the Regulation on the way of filling the teaching positions in the higher education institutions. The title list for teaching staff is drawn up annually and is established taking into account the educational plans, groups of students, teaching and research norms.

The organization of the study process in the "Business and Administration" study programme is ensured both by the Department of Economics and Management in Business and Services, as well as by other related departments from the university. The specialized disciplines are held by the professors of the department employed full-time or part-time. Part-time employment is mainly made from the list of university's teaching staff employed full-time and external people from the real sector employed part-time.

To teach other courses. Teaching staf from other departments are involved: Department of Finance and Accounting, Department of Mathematics and Computer Science, Department of Engineering and Applied Sciences, Department of Modern Languages, Department of Law, Department of History and Social Sciences, Department of Pedagogy and Psychology.

The selection of teachers for these courses is done by specialized departments. For these courses there are organized lectures shared with other programmes provided by the faculty.

Employment of the teaching staff at the chair / department is in line with the normative framework. All scientific and teaching positions at SUC are filled by competition, according to the requirements and procedure set out in the Regulation on the filling of teaching staff positins in higher education institutions. Based on the results of the contest, the University, on behalf of the Rector of SUC, concludes with each employee an individual labor contract for a determined period of 5 years. Teaching staff, employed part-time, meet the general requirements of the post / job set out in the Education Code and are employed in unoccupied teaching positions after a competition, according to the provisions of the Labor Code of the Republic of Moldova.

During its activity, the institution managed to form a motivated team of people. The professional development of didactic, scientific-didactic, scientific and management staff is mandatory throughout the professional activity and is regulated by the Government. Professional development is continuously carried out in USC by organizing various instructional seminars organized by the Department of Quality Education, Career Guidance and Career Counseling, local trainers of SUC, and others. Teachers actively participate in various professional training programmes through: internships of professinal training in higher education institutions, national and international educational and / or research projects, participate with presentations and / or works at conferences, seminars, symposiums, international exhibitions , academic mobility, etc. As a result of continuing professional training through internships in accredited education and research institutions, the SUC's teaching staff receive professional development credits.

A constant concern of SUC is to encourage and support young teaching staff in attending doctoral studies. This concern will be continued in the coming period, including by providing financial support to teachers who undertake PhD studies for a fee (payment of 1/2 fee by SUC).

The evaluation of the staff involved in the didactic and research activity in higher education is part of the quality assurance system and is carried out periodically in accordance with the Regulations for Quality Assessment of Didactic, Scientific-Didactic and Scientific Staff, approved by the SUC's Senate.

The development of scientific research is a priority objective of the institutional management whose achievement is meant to balance the relationship between didactic activity and research activity and to highlight the mission of the University as an educational and research institution.

At SUC, scientific research is the basis of the higher education process and is a professional obligation of each scientific-didactic, scientific and didactic staff. At institutional level, scientific research is provided by two operational structures: the Department of Science and the Department of External Relations and Academic Mobility.

The SUC's teaching staff organize and participate in various national and international scientific meetings. Certificates of participation, diplomas or copies thereof are collected in the personal file of each teacher which is kept at the Department of Economics and Management in Business and Services.

Every teacher has the freedom to choose an individual research topic, and at the end of each academic year, the teaching staff draws up the academic evaluation reports for the occupation of the scientific-didactic, scientific and didactic functions, according to the Regulation for the evaluation of the quality of didactic, scientific-didactic and scientific staff activity approved by the SUC Senate, in addition to including all the activities carried out, establishes, with supporting documents, the ones mentioned in the report. Thus the correctness and the degree of involvement of the scientific-didactic staff in the research process are evaluated.

## 5. DATA ANALYSIS AND INTERPRETATION

#### 5.1 INTRODUCTION

In this chapter we will make a comparative study between the Moldovan higher education system and the education systems of the European states: Denmark and Great Britain, highlighting both the similarities and the main differences, thus trying to highlight the weaknesses and strengths of the local system, which can improve and make Moldovan education more efficient.

#### 5.2 COMPARATIVE ANALYSIS: CRITERIA, PROPERTIES AND INDICATORS

Here we present synthetically the comparative situation in 3 universities under the indicators and criteria at each level: SUC (Republic of Moldova), AAU (Denmark), UoG (Great Britain).

Criteria, pro- perties, indicators	SUC	AAU	UoG
	L1 S	ystem level	
1.1.Acreditation of study programmes	For the purpose of accreditation, the Independent Agency ANACIP was founded. At the first stage, the study programmes of the 1st cycle, Bachelor's degree studies, then the study programmes of the 2nd cycle, Master's degree studies. Indicators are developed in order to evaluate study programmes.	The university has already been subject to accreditation on study programmes, so it has passed at a higher level when the University was assessed in its entirety and obtained the university accreditation certificate. Indicators are developed, according to a determined methodology, which allows the evaluation of the university.	The accreditation of the study programmes is done with the involvement of three organizations: the Privy Committee, the Agency for Quality Assurance in Higher Education, the Council for Higher Education Financing in England.
1.2 National quality assurance system.	In the Republic of Moldova, the National Agency for Quality Assurance in Professional Education (ANACIP) is responsible for ensuring an integrated, credible, objective and transparent system of external evaluation and	In Denmark, the Accreditation Agency is also in charge with the quality assurance issues. The structure and functions of the continuous quality assurance system in the university are predetermined by the criteria defined in general	In the UK, the national quality assurance body is the Quality Assurance Agency for Higher Education (QAA).

Table 6. Cross-case analysis

Criteria, pro- perties, indicators	SUC	AAU	UoG
	accreditation of institutions and study programmes.	in the University Act and in the Order of the Minister "Criteria for the Revelance and Quality of University Study Programmes and on Procedures for Approval of University Study Programmes".	
1.3. Professional bodies involved in accreditation.		bodies that contribute to the validation of Business and Administration study programmes or the way they are carried out, but within the university there	require the involvement of professional bodies in the accreditation process, although there are consultations with the
	L2. Universit	y management level	
Criterion 1. University governance, management and organization bodies	The system of governing bodies of SUC consists of the Senate, the Council for Institutional and Strategic Development, the Scientific Council, the Faculty Council, the Administration Council, and the Rector. The operative management of the University between Senate sessions is carried out by the Senate Bureau composed of the Rector, Vice-Rectors, Scientific Secretary of the Senate, with the support of the Administration Council.	The university Board and the Rector. It is a unitary management structure.	Governing Bodies: Council, Vice-Rector, Academic Committee, Secretary, Student Organizations. The existence of a university-level service "Help Zone", that has the competence to assist, help, guide students throughout their studies, facilitates the educational process.

Criteria, pro- perties, indicators	SUC	AAU	UoG
	The mandate of the Senate is 5 years, synchronized with the rector's term of office.		
Criterion 2. Institutional strategy of the university, incorporating the curriculum strategy with a focus on student-centered learning	the training of graduates for future employment is a priority objective for SUC.	commitment to learning and innovative teaching that is laid down in the 2016-2021 university strategy, focusing in particular on problem- based learning and student employability.	(2012-2017) provides for the development of
	(section) of the Quality Management in Education, the Department of Career Guidance and Career Consultation have been set up to create a Quality Management System (QMS) based on a policy, organizational structure and procedures to allow continuous monitoring,	there is a Group responsible for quality assurance and development. (University's Steering Group for quality assurance and development). This Group is responsible for systematically supervising internal quality and improving the quality	UoG is constantly concerned with ensuring a high quality of the entire study process, which would allow the training of highly qualified specialists. In order to achieve this goal, there is a quality assurance management structure, but the supervision of all quality assurance procedures within the University is within the competence of the Academic Council.

Criteria, pro- perties, indicators	SUC	AAU	UoG
	improvement of the quality of all training activities at the State University "Bogdan Petriceicu Hasdeu" of Cahul.		
Criterion 4. <i>Pedagogical</i> <i>training of teaching</i> <i>staff and their</i> <i>continuous training</i>	It is obligatory for teachers without pedagogical training to attend the psycho-pedagogical module in the amount of 60 study credits.	at the Aalborg University, which offers pedagogical	The UoG welcomes the participation of teachers, especially young ones, at various organized events. There is the Department of Continuous Teacher Training. Each teacher is obliged to attend certain courses.
	L3. Faculty	/ department level	
Criterion 1. The role of the faculty in the communication with stakeholders with regard to student- centered teaching and learning	and teachers who have classes at that faculty. There is the right to refuse certain professors who do not meet certain	departments are part of the internal organization of the university, where meetings are organized to share examples of good practice and performance in student-centered teaching	members, are involved in student-centered teaching and learning.
	L4. Level of the Council of Studies		
Criterion 1. <i>Structure of the</i> <i>body responsible for</i> <i>studies</i>	organizing studies in the SUC is the the Department (section) of the Quality	programmes and is instituted and abolished by the Dean of the faculty after	for organizing studies at the faculty level.

Criteria, pro- perties, indicators	SUC	AAU	UoG
	Consultation; Department of Planning, Evidence and Documentation of the Study Process; Continuing Training Center. All three departments are	for these programmes. Each Study Board must include an equal number of teachers and students' representatives elected by academic staff and students	
Criterion 2. Analysis of the evaluation practice	assessment (during the	various evaluation methods, peer evaluation, monitoring of the evaluation, inclusion of an external evaluator.	The evaluation methods, very diversified, depending on the course, teacher, are stipulated in the discipline curriculum. There are regulations that students know before starting the course and know exactly how the assessment will be done, what is the share of each type of evaluation. The evaluation has a continuous character.
Criterion 3. The way to develop a new study programme	complicated. At the chair / department level, a working team is formed, who develops the educational plan, arguing the need to initiate such a study programme. Internally, it must be approved at the meeting of the faculty, faculty council, and Senate. If this study programme exists in the nomenclature of specialties, than it is	new study programme in Cycles I and II comes, as a rule, from a teaching staff, group of teachers forming the programme team or from a research group. At the faculty there is an experienced legal adviser in the field of education who helps the team to develop the document package. The Dean signs this package after rigorous legal scrutiny. The study programme is approved by	Bachelor's degree study programme in the UoG is the Department, where a programme committee is formed, which argues, and then elaborates the curriculum of the study programme. The study programme is discussed within the Department, then by the Faculty's Academic Committee. A special role is assigned to professional associations.

Criteria, pro- perties, indicators	SUC	AAU	UoG
	provisional authorization from ANACIP. If this study programme is absolutely new, it is necessary to enter this programme into the Nomenclature of Specialties. This is done by Government Decision.	evaluation at the academic board level.	monitoring of study programmes are described in the Quality Code.
Criterion 4. Involvement of students in the development of study programmes	Students are not involved directly in developing the study programme. However, indirectly, they are involved by including representatives in the Faculty Council, in the SUC's Senate where these documents are discussed and voted, where they can express their views. Also, students are questioned with regard to the course or on the whole study process.		• • •
Criterion 5. Periodic monitoring and analysis of study programmes	carried out every 5 years.	programmes is done every semester, 8 annual meetings are organized for	annually, including through feedback from
	L5. Integration of disadvantaged groups of students		
Criterion 1. The existence of a body dealing with students with disabilities	The University does not have a center / office specifically dedicated to disabled students, which is why there are no specific responsibilities for		At the UoG there is the Help Zone office in every campus.

Criteria, pro- perties, indicators	SUC	AAU	UoG
	teaching staff and management staff, and there is no allocation of resources in that direction. However, within certain limits the institution focuses on the positive solution of the respective problems by creating access to the institution ( <i>special ramps</i> ), the appointment of persons as " <i>Supervisors on</i> <i>specialties</i> ", who have the task of guiding, helping students of the targeted specialties.		
Criterion 2. Ways of working with disadvantaged students in relation to teaching	Important steps are being taken to create minimum conditions so that they are not marginalized. Counseling is done by the group supervisor.	2	They work very hard with them through the HelpZone office. The range of services they can benefit from is very broad, including issues related to teaching, learning, assessment.
	L6. Infrastructure	e (Physical environment)	
Criterion 1. Ensuring facilities tailored to the needs of people with disabilities	takes measures to adapt the infrastructure so as to ensure the access to	There is an infrastructure that provides access to studies and offers learning opportunities to students with disabilities, including the visually impaired ones.	access to studies and offers learning opportunities for
Criterion 2. Existing facilities for students to support problem-based learning	infrastructure, with lecture halls, campuses, scientific	The University has a very good infrastructure, with well-equipped study halls, campuses, libraries, WI-FI connection, and so on.	infrastructure at the university, with well-

Criteria, pro- perties, indicators	SUC	AAU	UoG
			campuses, libraries, WI-FI connection etc.
	L7. Study programme leve	el (Business and Administra	ation)
Criterion 1. Structure of the Business and Administration study programme			The duration of the studies is 3 years, 6 semesters respectively
Criterion 2. Student's workload	in transferable credits: for one academic semester - 30 ECTS; for one academic	study is equivalent to 60 ECTS, respectively each semester, 30 ECTS. 1 ECTS equals 27 hours of	In the United Kingdom, the workload for one year is 120 CAT. 1 ECTS equals 2 CAT, 1 CAT is equivalent to 10 hours of student work
Criterion 3. Student assessment	assessment of the student learning activity, explaining the types of evaluations performed at	<ul> <li>information about the types of examinations, how they are performed, the requirements for the answers students have to give.</li> <li>There are Regulations that explain in detail every possible situation.</li> <li>The assessment is based on certain skills that</li> </ul>	<ul> <li>Each curriculum contains information about the types of examinations, how they are performed, the requirements for the answers students have to give.</li> <li>There are Regulations that explain in detail every possible situation.</li> <li>The assessment is based on certain skills that students must demonstrate.</li> <li>The UoG publishes separate principles and procedures for assessing students with disabilities.</li> </ul>

Criteria, pro- perties, indicators	SUC	AAU	UoG
	grade is 40% of the final grade.		
Criterion 4. Involvement of teaching staff, students, graduates, employers in the design, management and improvement of the study programme	directly involved in designing a study programme. However, before putting certain courses on paper, students, employers, graduates are consulted either through different questionnaires, ororganizing different round tables, etc. So, more parties are indirectly	in the elaboration, development and improvement of a study programme: teaching staff, students, employers, graduates, both directly (through participation in different committees) and indirectly (through	development and improvement of a study programme: teaching staff, students, employers, graduates.
Criterion 5. Avoiding and punishing cheating and plagiarism	there is the Code of Ethics of the University, the	there is a special VBN portal that tests all the projects, the bachelor's and master's degree theses against plagiarism.	software since autumn
Criterion 6. <i>Student</i> appeals	on a regulatoru basis. Students can challenge the	Regulations stipulating the conditions when appeals	There are Regulations that stipulate in great detail the conditions when appeals can be submitted, how to resolve them.
Criterion 7. The current grading system	is appreciated with grades from 10 to 1. Grades from	system based on 7 scales, consisting of five positive grades 0, 2, 4, 7, 10, 12 and	In the UK, the grading system is expressed in percentage and in letters. Thus, 70-100% equals to A, 60-69% - B; 50-59% -

Criteria, pro- perties, indicators	SUC	AAU	UoG
	allow obtaining the credits allocated to them according to the educational plan. The final grade results from the average sum of the grades from the current valuations and the final examination and is accurately entered with a semicolon.	two negative grades 00 and -3, is used.	C; 40-49% - D. These are the promotion grades. Those below 40% are not promotion grades.
Criterion 8. Role of the external examiner	required in the case of the completion exam of the	The external examiner is required to be present in the student assessment activity for greater objectivity of their assessment.	phenomenon is practiced - an external teacher (another
Criterion 9. Employability of graduates		e ,	In the UoG, the one-year internship is welcomed and stimulated, with the interruption of the study process. Several initiatives are developed, which aim to contribute to a better employment of graduates.

## 5.3 **EMERGING PATTERNS**

#### Table 7. Data reduction table

	Common patterns	Peculiarities
	L1: System level	
Criterion 1. Acreditation of study programmes	programmes is required. There are	Different names of the bodies responsible. The methodologies used and the indicator system largely reflect the specificity of the country and the higher education system concerned.
Criterion 2. <i>National quality</i> assurance system	monitor and, implicitly, ensure and	In Denmark and the Republic of Moldova accreditation agencies are also in charge of quality assurance issues.
	2. Quality assurance is part of the accreditation process of teaching and research, in order to substantiate research resources.	-
	3. One of the criteria imposed by the Ministry is the continuous assurance of the internal quality of the study programme.	
Criterion 3. Professional bodies involved in accreditation		In Denmark, within the university there are advisory bodies at the level of each Study Board, composed of competent and notorious external persons
	L2. University management level	
Criterion 1. University governance, management and organization bodies	There is a Governance and Management system	<i>Denmark:</i> The university Board and the Rector. It is a unitary management structure.
		<i>United Kingdom:</i> Governing Bodies: Council, Vice-Rector, Academic Committee, Secretary, Student Organizations.

	Common patterns	Peculiarities
		<i>Republic of Moldova:</i> Senate, the Council for Institutional and Strategic Development, the Scientific Council, the Faculty Council, the Administration Council, and the Rector
Criterion 2. Institutional strategy of the university, incorporating the curriculum strategy with a focus on student-centered learning	institutional strategies. In all institutional strategies emphasis is	In <i>Aalborg University</i> there is an institutional commitment to learning and innovative teaching that is laid down in the 2016-2021 university strategy, focusing in particular on problem-based learning and student employability.
		The <i>UoG's Strategic Plan</i> (2012-2017) provides for the development of student-centered education.
		In the AESM Charter, Chapter VII "Promoting student-centered education" is dedicated to this topic.
		In <i>the SUC Charter</i> ; Institutional Development Strategy for 2012-2016.
Criterion 3. <i>Quality assurance</i> bodies at university level	In each university there are bodies established to ensure a high level of teaching and research activity.	0
		<i>In the UoG</i> , supervision of all quality assurance procedures is within the competence of the Academic Council.
		<i>At USC</i> , at the Senate level, the Quality Commission and the Department (Division) are involved for quality management in education, guidance and career consultation were established.

	Common patterns	Peculiarities
Criterion 4. Pedagogical training of teaching staff and their continuous training	There are requirements at each university level to prove formal pedagogical training. There is a need, but also lifelong learning conditions.	Learning Lab is created, the PBL
	L3. Faculty / department level	
Criterion 1. The role of the faculty in the communication with stakeholders with regard to student-centered teaching and learning	Faculties and chairs / departments are part of the internal organization of the university, where meetings are organized to share examples of good practice and performance in student- centered teaching and learning.	
	L4. Level of the Council of Studies	5
Criterion 1. Structure of the body responsible for studies	each of the universities, but the role of this body is different.	<i>In Aalborg,</i> the Study Board manages one or more study programmes and is instituted and abolished by the Dean of the faculty. <i>In the UoG</i> there is a body responsible for organizing studies at the faculty level. <i>In SUC</i> there is the Department of planning, tracking and
		documentation of the educational process
Criterion 2. Analysis of the evaluation practice	Each university has a rich experience in using different ways of evaluating students.	
Criterion 3. <i>The way to develop a</i> <i>new study programme</i>	There are clear provisions for how to develop a new study programme.	The initiative to develop a new study programme at Aalborg University can come from a teacher, while in the UoG and SUC, the initiator can be the department (the chair).

In all universities students are						
	There are clear provisions in Aalborg University regarding the participation of students in the Study Board, responsible for the development of the study programme. In SUC and UoG, students' involvement is indirect through their participation in the bodies that then analyze and approve these plans, but also through various questionnaires the students take part in.					
	At Aalborg University they are analyzed every semester, in SUC and UoG - annually.					
L5. Integration of disadvantaged groups of students						
	directly or indirectly involved in developing the study programme.					

Criterion 1. The existence of a body dealing with students with disabilities		There is a specialized body – HelpZone - in the UoG. In SUC and Aalborg University at the institutional level and at the faculty level their record is kept to determine the individual support and assistance measures that can be offered.					
Criterion 2. Ways of working with disadvantaged students in relation to teaching		The HelpZone office in the UoG also provides assistance to disadvantaged people with regard to teaching-learning-evaluation. In SUC, counseling is provided by group supervisors.					
L6.	L6. Infrastructure (Physical environment)						

Criterion 1. Ensuring facilities	Universities have infrastructure
tailored to the needs of people	that provides access to studies and
with disabilities	offers learning opportunities for
	students with disabilities

	Common patterns	Peculiarities
Criterion 2. Existing facilities for students to support problem-based learning	Universities are well equipped with study halls, computers, well- arranged campuses, libraries, WI- FI connection, and so on.	
L7. Study p	rogramme level (Business and Adı	ninistration)
Criterion 1. Structure of the Business and Administration study programme		In UoG, it is possible (welcomed) to interrupt studies over a year in favor of the internship. The internship period as a compulsory component of the study programme exists at SUC.
Criterion 2.Student's workload	measured in transferable study credits and consists of work with the teacher in the auditorium	In Aalborg University and SUC, the workload is measured in ECTS (30 per semester and 60 per year respectively), and in UoG in CAT (60 per semester and 120 per year). 1 ECTS in Denmark = 27 student working hours 1 ECTS in the Republic of Moldova = 30 hours 1 CAT = 10 hours
Criterion 3. Student assessment	examination is practiced	<ul> <li>In Aalborg University, a specificity of the examination is determined by the large share of team work.</li> <li>Different examinations for people with disabilities are conducted in the UoG.</li> <li>In SUC there is a calculation formula for determining the final grade for the discipline.</li> </ul>

	Common patterns	Peculiarities
Criterion 4. Involvement of teaching staff, students, graduates, employers in the design, management and improvement of the study programme	students, teachers, employers, graduates, participate in the	In the AAU, teachers and students participate in an equal number in drafting the study programme. In the other universities, the actors involved, to a large extent participate indirectly in the design, management and improvement of the study programme.
Criterion 5. Avoiding and punishing cheating and plagiarism	In all universities, plagiarism and cheating are not tolerated. Different ways of preventing and fighting this scourge are used.	special VBN portal that tests all
Criterion 6. Student appeals	Students have the right to challenge evaluation grades. There are elaborated Regulations, which in detail explain how, when, under what conditions, the grades can be challenged.	
Criterion 7. <i>The current grading</i> system	system in each university, which allows to know in advance what is	In Denmark, a grading system based on 7 scales, consisting of five positive grades 0, 2, 4, 7, 10, 12 and two negative grades 00 and -3, is used.
		In the UK, the grading system is expressed in percentage and in letters. Thus, 70-100% equals to A, 60-69% - B; 50-59% - C; 40-49% - D. These are the promotion grades. Those below 40% are not promotion grades.

	Common patterns	Peculiarities
		Assessment of knowledge in the Republic of Moldova is appreciated with grades from 10 to 1. Grades from "5" to "10", obtained as a result of the evaluation, allow obtaining the credits allocated to them according to the educational plan.
Criterion 8. Role of the external examiner	same role in assessing the students	In the AAU and UoG for every current exam, people from outside are invited to allow more objective evaluation of student learning outcomes.
		In SUC, the external examiner is only present at the completion of the studies.
Criterion 9. <i>Employability of graduates</i>	Study programmes are committed to employability.	

# 6. PILOTING THE "BUSINESS ADMINISTRATION" BACHELOR'S DEGEE PROGRAMME WITH STUDY COMPONENTS IN ENTREPRENEURSHIP

#### 6.1 INTRODUCTION

When developing the educational plan for the bachelor's degree study programme "Business Administration" with study components in Entrepreneurship, the provisions of the Framework Plan and National Qualifications Framework for domain 36, specialty 363.1 Business and Administration, were taken into account.

The graduate obtains the title of Bachelor of Economic Sciences for full accomplishment of the educational plan, the promotion of the evaluation tests, including the bachelor's examination, according to the grading system in the Republic of Moldova ranging from 1 to 10 points, the promotion grades being 5 to 10, and the accumulation of 180 transferable credits under the European Credit Transfer System (ECTS). The study programme was based on the objectives and requirements of the National Qualifications Framework according to the general field of study: 36. Economic Sciences; field of professional training: 363. Business and Administration; specialty: 363.1. Business and Administration.

The set of teaching methods and procedures used in the training process will contain both the traditional methods (lectures and seminars), modified and completed according to the proposed objectives, as well as the modern, interactive methods oriented towards the cultivation of interest, motivation, activism, social collaboration, organization spirit, initiative, inventiveness and creativity.

In the study process the focus will be on active-participative (interactive) methods, which increase the intellectual potential of beneficiaries by engaging in a personal effort in the process of learning and training of students for an active and creative professional life. Flexible and diversified forms of organization specific to the nature of content and work with adults will be used that provide formative, operational, action-oriented, developmental learning focused on the formation of operational capabilities, psychological processes, skills, attitudes, beliefs, values, ideals and aspirations, changes in mentalities (lectures, seminars, computer-aided training, laboratories and workshops, etc.). Methods and procedures such as case study, role play, heuristic conversation, debates, brainstorming, problem-solving, investigation, project, multiple-angle exploration, panel discussion, argumentation and counter argumentation, independent academic learning, etc. will be specifically combined for different situations.

The personal support of each student will be provided by the tutorial system.

The evaluation will focus on the effectiveness of educational activities in terms of the relationship between the projected objectives and the results obtained by the students in the learning process. It will be done by the teachers and will focus not only on knowledge but also on skills, abilities and attitudes.

The evaluation will have a complex pedagogical function:

- a) from the perspective of the assessed one of stimulating, strengthening the results, building skills, raising awareness of one's own possibilities, positive professional orientation;
- b) from the perspective of the assessor of assessing the efficiency of his/her activities and of the changes necessary for the full achievement of the objectives.

#### 6.2 **PROGRAMME OUTCOMES**

The National Qualifications Framework has the following objectives:

- 1. Demonstrate functional knowledge in the following areas:
  - 1.1. Economic theory genesis, essence, methodology and method, economic laws
  - 1.2. Management the evolution of management science, the main contents, managerial processes and functions
  - 1.3. Marketing development and realization of the company's marketing policy
  - 1.4. Markets the study, operation and development of resource, goods and services markets
  - 1.5. Customers factors of influence, purchasing and consumption processes, consumption patterns
  - 1.6. Law knowledge of legislation on entrepreneurship and business, small business, consumer protection, advertising in the Republic of Moldova
  - 1.7. Finance finance management, use of accounting and other financial systems
  - 1.8. Information systems development and exploitation of information systems with impact on the achievement of managerial functions in the organization.
- 2. Start a business
- 3. Know how to identify business ideas and evaluate opportunities
- 4. Possess methods to assess and minimize business risks
- 5. Ensure that activities are carried out in accordance with established laws and regulations
- 6. Adjust the organization's work to the requirements of the environment
- 7. Take optimal decisions under conditions of certainty, uncertainty, risk
- 8. Develop the organizational structure of the organization
- 9. Evaluate and improve the efficiency and effectiveness of the organization's activities
- 10. Self-motivate and increase the efficiency of his/her own activity
- 11. Form teams and develop collaboration
- 12. Motivate and create productive labor relations
- 13. Apply quality management systems
- 14. Communicate convincingly and effectively
- 15. Ensure and manage the efficient use of material, financial and informational resources
- 16. Organize the business and administration research process
- 17. Draw up an applicative paper dealing with solving a problem in the field of business administration
- 18. Develop and coordinate project implementation
- 19. Know the competence and involvement area of managers at different hierarchical levels

20. Develop judgments based on the knowledge of the social and ethical issues that arise in work or study.

## 6.3 DESCRIPTION OF THE PROGRAMME (ANNEX 1)

#### 7.1 INTRODUCTION

The Roadmap is a consolidated list of measures, commitments and timelines for implementing actions to overcome the challenges identified in the pilot study programme for the implementation of Problem-Based Learning.

Its immediate purpose is to establish an institutional foundation to overcome certain barriers or certain threats to the implementation of the project in question.

As far as the implementation period is concerned, it must be taken into account that some new elements that will be implemented can be included in the existing regulatory framework, while others require some changes in the existing regulatory acts.

#### 7.2 FIT-FOR-PURPOSE

In order to implement the pilot study programme, mentioned in Chapter VI, a Roadmap was developed. This includes several necessary activities to be implemented at the institutional level in order to successfully implement the pilot study programme. The implementation of this Action Plan has already begun, with some activities being carried out, others having to be launched. We could formally divide these activities into several groups:

- I. Activities related to the *training of the teaching staff* with regard to the use of the PBL method. In this respect, some of the teachers who will have classes in the respective group, which is going to be enrolled and established this year, have participated and will participate in several trainings organized under the project at TUM or at SUC during 2016-2017. Also, several teachers have benefited from academic mobility at partner Universities in the European Union, where they were able to get acquainted with the method in question. Multiple trainings for teachers on problem-based learning, the use of equipment in the teaching and assessment of students, and the development of on-line courses, etc. will be organized within SUC.
- II. Activities related to the *elaboration* of the educational plan for the students who will study within the pilot study programme. When elaborating the plan, it was taken into account the experience seen and studied in the partner Universities of the European Union, the legislative and normative acts regulating the activity in higher education in the Republic of Moldova. Also, some proposals have been made to amend some of the provisions of the normative acts in force, in order to be able to carry out the activity within the pilot study programme under the regulatory conditions.
- III. *Preparing the physical environment* for organizing studies. In this regard, the SUC is equipped with everything necessary, including study halls, literature, access to databases, etc. Also, from the sources of the project with SUC co-financing, two student study rooms were prepared for the team work of the students, WI-FI was installed free of charge, and 4 other study halls were equipped with interactive whiteboard. The SUC

library has been completed with books purchased under this project with reference to problem-based learning that everyone can read.

- IV. Another group of activities refers to the *organization of the Admission 2017*. In this sense, information leaflets on the pilot study programme will be prepared, which will be sent to high school graduates. The information will also be made public on the SUC website, will be published in the university promotion newspaper, but also in other local and regional newspapers.
- V. *Elaboration of educational documents:* curricula on disciplines (analytical programmes / syllabi), guidelines, case studies, evaluation etc. (for the first year of study).
- VI. Activities related to *the dissemination of good practice*. In this regard, the SUC website, on which we will publish regularly information on the implementation of this project (this is already done) will be used, the members of the project team will participate with communications at various conferences, workshops, will produce scientific articles to be published in scientific journals in the country.
- VII. *Extending the project* to other specialties within SUC, especially at the Faculty of Economics, Engineering and Applied Sciences.

All of these activities will require some resources. The necessary financial resources will be covered by the project (mobility of teaching staff and students, procurement of equipment, etc.), with the support of SUC (organization of trainings with teachers, motivating them, refurbishment works, procurement of equipment, etc.).

#### Responsible Implementation Resources **Implementation actions** deadline person December 2015 FR: within the Assessment of the necessity and Popa A. 1. opportunity of elaboration / approved budget modification of the study limits programme and initiation of the HR: head of the elaboration process. EMAS Chair / Department. academic staff Setting up the Working Group December 2016 Popa A. HR: Academic staff 2. and designating the person responsible for drafting / modifying the study programme Popa A. January - March 2017 FR: within the Analysis of similar national and 3. international programmes approved budget Rosca-Sadurschi (including visited universities / limits L. EU partners in the project) HR: Academic staff Todos I. Girnet S. Assessing the expectations of Rosca-Sadurschi January - March 2017 Real sector partners 4. the economic and social sector L. regarding the content of the study programme and the provisions of the new teaching and evaluation methods March – April 2017 HR: Academic staff Developing the study Roșca-Sadurschi 5. programme. Discussing it at the L. faculty council October –November Training of the teaching staff for FR: within the 6. working within the pilot study 2016 approved budget limits programme: February-March 2017 HR: Academic Staff. - Mobility to AAU April-June 2017 Partner universities - Mobility to UOG June 2017 - Training seminars at SUC - Seminar at TUM Adjustment and approval of the Rosca-Sadurschi April – May 2017 HR: Academic staff 7. modified plan at the meeting of L. FEISA faculty council and the SUC Senate

# Table 8. Roadmap for the implementation of the Business and Administration pilot study-programme

	Implementation actions	Responsible person	Implementation deadline	Resources
8.	Extending the Pilot Programme to other programmes (approval of changes in the educational plans, approval by the council, senate)	Popa A. Roșca-Sadurschi L.	May – June 2017	HR: dean, head of department, academic staff
9.	Adjustment of academic curricula to PBL requirements	Roșca-Sadurschi L. The teachers involved	June – August 2017	HR: heads of departments, academic staff
10.	Preparation of two study rooms for team work. Installation of the equipment.	Popa A. Danilceac O.	March - June 2017	FR: within the approved budget limits HR: Vice-rector for educational activity, social and administrative- household relations, Technical Service
11.	Campaign to promote the study programme: - production of advertising leaflets; - visits to high schools, - SUC website - newspaper ,,Îndrumarul abiturientului" - local and regional newspapers	The person responsible for the study programme , Danilceac O.	March – June 2017	FR: within the approved budget limits HR: academic staff, vice-rector for educational activity, social and administrative- household relations
12.	Organization of admission.	Popa A. Admission committee	June – August 2017	HR: Vice-rector for educational activity, social and administrative- household relations, admission committee
13.	Developing professional training approaches according to the PBL educational strategy (application of didactic methods: problem-solving, case study, project, group work, etc.)	The teachers involved	June - August 2017	FR: within the approved budget limits HR: heads of departments, academic staff

	Implementation actions	Responsible person	Implementation deadline	Resources
14.	Initiating the pilot study programme	Popa A. Roșca – Sadurschi L.	September 1, 2017	HR: heads of departments, academic staff
15.	Deployment of the study programme	The person responsible for the study programme The teachers involved	September 2017 - June 2020	FR: within the approved budget limits HR: Academic staff
16.	Elaboration of educational documents: curricula on subjects (analytical programmes), guidelines, case studies, evaluation etc. (for the years II and III of studies)	The person responsible for the study programme The teachers involved	September 2017 - June 2018	HR: Academic staff
17.	Developing the necessary documents for the selection of students for mobility	The person responsible for the study programme	October – November 2018	HR: Dean, External Relations Service
18.	Student selection for mobility	The person responsible for the study programme	February - March 2018	HR: Dean, External Relations Service
19.	Student mobility	Popa A. Bîrlea S. The person responsible for the study programme	Septembrie – December 2018	FR: within the approved budget limits HR: Dean's Office, academic staff, students
20.	Monitoring and improvement of the pilot study programme: undertaking corrective and preventive actions	Popa A. Bîrlea S. Todos I. The person responsible for the study programme	During the study year 2017-2018	HR: Dean's Office, academic staff, students

#### 7.3. CHANGING THE CONTENT

The Roadmap presented above includes some activities required for implementation of problem-based learning within the Entrepreneurship and Business Administration (Business and Administration) pilot study programme. In fact, we can not include all the necessary changes in this action plan. As mentioned above, we started from the idea that we must maximally fall within the existing regulatory framework, which means that starting with September 1, 2017, we could start implementing this programme. At the same time, certain changes have been made, which can not be within the existing normative limits and which would require a favorable opinion from the Ministry of Education of the Republic of Moldova. In the table below, we highlight these moments:

Article	Provision	Proposals
Framework Plan for Higher Education, art. 9.	In <b>Cycles I and II</b> , the course unit / discipline can be accomplished through <b>classroom activity</b> (direct contact): lectures, seminars, laboratory works, practical works, design works, didactic, clinical internships and other forms approved by the Senate; as well as <b>non-classroom didactic</b> <b>activity</b> : didactic-artistic or sports activities; <i>annual</i> , <i>bachelor, master's degree projects / theses</i> ; individual activities, social and community activities, other activities provided by institutional regulations.	To assign to the class didactic activity the supervision of the team activity of the students
Regulation on the organization of studies based on NSSC, art. 20	For the study programmes of 180 credits, an annual thesis shall be developed in the second year of study. For study programmes of 240 credits, an annual thesis shall be developed in the second and third year of studies.	To exclude the limitation to a single project

#### Regulatory provisions required to be amended

At the same time, the changes mentioned in the educational plan existing in the "Business and Administration" specialty also require the adaptation of the theoretical and practical courses to the new requirements. It is necessary to prepare case studies, to prepare some didactic materials, which would allow a better understanding of the essence of PBL use, the role of the teacher, the role of the student, which involves teamwork, the division of responsibilities, how the evaluation takes place, etc. It is necessary to train the teachers and ensure their continuous improvement in the field of PBL use and to prepare methodological resources.

Improving higher education can be achieved both through structural changes in education and through the implementation of teaching and learning methods. The choice, from the variety of educational methods, of those considered most effective for a particular teaching activity, is exclusively the result of the teacher's decision. In making this decision, the didactic staff takes into account the following considerations: the pedagogical objectives pursued; the specifics of the learning content; students' particularities; the available time; his / her own pedagogical and methodical skills. As an example, "Problem Based Learning" (PBL) is the most appropriate one, changing the classical approach of higher education, by changing the role of the teacher, the attractiveness of problem-based studies, and by assigning students an important role in identifying and solving problems.

PBL is a student-centered training model based on research where the student engages with a genuine, poorly structured problem requiring more in-depth research <sup>56</sup>. Students identify the shortcomings in their knowledge, carry out research, and apply what they have learned to develop solutions and present their findings <sup>57</sup>.

The PBL model is based on new perspectives in learning:

- 1. Knowledge from research (analytical knowledge)
- 2. Knowledge based on experience (knowledge based on practice)
- It is important to ensure the synergy between these two.
- 3. Creativity: Can be learned
- 4. The ability to learn increases with the level of knowledge (absorption capacity theory)

In the literature we consulted in the PBL field, we noticed an important risk for using PBL: despite the potential benefits of PBL, many teachers lack confidence or knowledge to use it. Student-centered learning, such as PBL, contributes substantially to increasing student competitiveness and employability. It also contributes to the dissemination of research results, which enables academic staff to engage in research-based teaching, providing students with the latest scientific and business developments.<sup>58</sup>

Key success factors of the project, but also of the PBL method are:

- Allow students to take the lead and take responsibility for their own studies;
- Create a symmetrical power relationship between students and teachers;
- Promote competitiveness and possibility of increased employability of students;
- Integrate and support socially disadvantaged students.

<sup>&</sup>lt;sup>56</sup> Jonassen, D. H., & Hung, W. (2008). All problems are not equal: Implications for problem-based learning. *Interdisciplinary Journal of Problem-Based Learning*, 2(2), 4.

<sup>&</sup>lt;sup>57</sup> Barrows, H.S. (1996). Problem-based learning in medicine and beyond: A brief overview. In L. Wilkerson, & W. H. Gijselaers (Eds.), *New directions for teaching and learning*, No.68 (pp. 3-11). San Francisco: Jossey-Bass.

<sup>&</sup>lt;sup>58</sup> http://www.pblmd.aau.dk/about-pblmd/

#### Annex 1

#### Year of study I, Semester I

Code	The name of the course unit / module		Total ho	ours			hours ctivity	of ent	edits
		Total	Direct contact	Individual study	С	S	L/P	Form of assessment	Nr. of credits
G.01.O.001	Foreign language I	60	30	30	-	10	20	Е	2
G.01.O.002	Information communication technologies	60	30	30	10	-	20	E	2
G.01.O.049	Principles of study through the method "Learning through Problem Research" ( <i>PBL – Problem Based Learning</i> )	60	30	30	10		20	Е	2
F.01.O.003	Economic theory I (microeconomics) <sup>*</sup>	180	90	90	45	45	-	E	6
F.01.O.004	Economic mathematics	180	60	120	30	30	-	Е	6
F.01.O.050 S.01.O.005	Module: Economic Informatics and Business Communication: Economic informatics Correspondence and business communication	<i>180</i> 90 90	60 30 30	<i>120</i> 60 60	30 15 15	<i>15</i> 15	<i>15</i> 15	E	б
F.01.O.006	The basics of management $*$	180	60	120	30	30	-	Е	6
	Total hours with the assigning of study credits	900	360	540	155	130	75	6E	30
G.01.O.007	Physical education	30	30	-	-	-	30	adm	_
TOTAL	HOURS PER SEMESTER I	930	390	540	155	130	105	6 E	30

\* A joint mini-project will be developed for both disciplines (for each semester in part). Mini-project - group work (3-5 students) of the research problem related to a group of related course units. Passing the examination and awarding study credits is conditional on the MANDATORY defence of the Mini - Research Project.

\*\* A joint mini-project will be developed for both disciplines. Mini-project - group work (3-5 students) of the research problem related to a group of related course units. Passing the examination and awarding study credits is conditional on the MANDATORY defence of the Mini - Research Project.

Code	The name of the course unit / module	Total hours					' hours activity	of ent	edits
		Total	Direct contact	Individual study	С	S	L/P	Form of assessment	Nr. of credits
G.02.O.008	Foreign language II	60	30	30	-	10	20	Е	2
G.02.O.009	Ethics and professional culture	120	60	60	30	30	-	Е	4
F.02.O.010	Economic theory II (macroeconomics) <sup>*</sup>	180	90	90	45	45	-	Е	6
F.02.O.011	The basics of entrepreneurship <sup>*</sup>	180	90	90	45	45	-	Е	6
F.02.0.012	Economic statistics <sup>**</sup>	180	60	120	30	30	-	Е	6
F.02.0.013	Basics of accounting <sup>**</sup>	180	60	120	30	30	-	Е	6
TOTAL	HOURS PER SEMESTER II	900	390	510	180	190	20	6E	30

#### Year of study I, Semester II

\* A joint mini-project will be developed for both disciplines (for each semester in part). Mini-project - group work (3-5 students) of the research problem related to a group of related course units. Passing the examination and awarding study credits is conditional on the MANDATORY defence of the Mini - Research Project.

\*\* A joint mini-project will be developed for both disciplines. Mini-project - group work (3-5 students) of the research problem related to a group of related course units. Passing the examination and awarding study credits is conditional on the MANDATORY defence of the Mini - Research Project.

Year of stud	y II, Semester II	I
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Code	The name of the course unit / module	Total hours				per of ho be of acti	of ent	edits	
		Total	Direct contact	Individual study	С	S	L/P	Form of assessment	Nr. of credits
G.03.O.014	Foreign language III	60	30	30	-	10	20	Е	2
U.03.A.015 U.03.A.016	Economic doctrines Philosophy and logic of economic and engineering activity	120	60	60	30	30	-	E	4
S.03.A.017 S.03.A.018	Production management* Technology and merceology	180	90	90	45	45	-	E	6
F.03.0.019	Management methods and techniques*	180	90	90	45	45	-	E	6
S.03.A.020 S.03.A.021	Company finances * Finances	180	60	120	30	30	-	E	6
S.03.A.022 S.03.A.023	Business law* International commercial law	180	60	120	30	30	-	Е	6
TOTAL HOU	URS PER SEMESTER III	900	390	510	180	190	20	6E	30

\* An interdisciplinary semestrial project will be developed (for each semester in part). **Project** - Group work of 3-5 students of the research problem related to all course units (Fundamental and / or Specialty) in the semester. Passing the examination and awarding study credits is conditional on the MANDATORY defence of the Project.

Code	The name of the course unit / module	1	Total hours		Number of hours by type of activity			of ent	edits
		Total	Direct contact	Individual study	С	S	L/P	Form of assessment	Nr. of credits
G.04.O.024	Foreign language IV	60	30	30	-	10	20	Е	2
U.04.A.025 U.04.A.026	Leadership Initiation in the human capital economy	120	60	60	30	30	-	E	4
*G.04.O.027	Communication techniques (for alolingve groups)								
*U.04.A.028 *U.04.A.029	Oratory art (except for alolingve groups) Communication techniques (except for alolingve groups)	90	0 45	45	15	-	30	Е	3
S.04.A.051 S.04.A.030 S.04.A.031	Entrepreneurial project management* Planning systems Business planning	180	90	90	45	45	-	E	6
F.04.0.032	Marketing*	180	60	120	30	30	-	Е	6
F.04.0.033	Human resources management*	180	60	120	30	30	-	Е	6
	Specialtu (initiation) internship*	90		45		1,5 weel	ks	Е	3
TOTAL HOURS PER SEMESTER IV		900	345	510	150	145	50	7E	30

Year of study II, Semester IV

\* An interdisciplinary semestrial project will be developed (for each semester in part). **Project** - Group work of 3-5 students of the research problem related to all course units (Fundamental and / or Specialty) in the semester. Passing the examination and awarding study credits is conditional on the MANDATORY defence of the Project.

### Year of study III, Semester V

Code	The name of the course unit / module	Total hours				er of he e of act	of ent	dits	
		Total	Direct contact	Individual study	С	S	L/P	Form of assessment	Nr. of credits
U.05.A.034 U.05.A.035	European economic integration Community regional development policies	90	45	45	20	25	-	E	3
U.05.A.036 U.05.A.037	Intellectual property law Legal initiation in copyright and related rights	90	45	45	20	25	-	E	3
S.05.O.038	Economic and financial analysis*	180	90	90	45	45	-	Е	6
S.05.O.039	Risk management*	180	90	90	45	45	-	Е	6
S.05.A.040 S.05.A.041	Supply management** Sales techniques	180	60	120	30	30	-	Е	6
S.05.A.042 S.05.A.043	Quality management** Quality management systems	90	30	60	15	15	-	E	3
S.05.O.044	Entrepreneurial development project***	90	30	60			30	Е	3
TOTAL H	OURS PER SEMESTER V	900	390	510	175	185	30	7, E	30

\* A joint mini-project will be developed for both disciplines.

\*\* A joint mini-project will be developed for both disciplines.

\*\*\* A mini-project will be developed. Mini-project - group work (3-5 students) of the research problem related to a group of related course units. Passing the examination and awarding study credits is conditional on the MANDATORY defence of the Mini - Research Project

Code	The name of the course unit / module	Total hours				er of h e of act	of ent	edits	
		Total	Direct contact	Individual study	С	S	L/P	Form of assessment	Nr. of credits
S.06.A.045 S.06.A.046	Comparative management* Management of international trade	90	45	45	22,5	22,5	-	E	3
S.06.A.047 S.06.A.048	Innovative management* Merchandising	90	45	45	22,5	22,5	-	Е	3
	Specialty (production) internship*	180	-	180	3 weeks			Е	6
	Research (Bachelor's degree) internship	270	-	270	4,5 weeks			Е	9
	Bachelor's degree examination	270	-	270	-	-	-	Е	9
TOTAL HOURS PER SEMESTER VI		900	90	810	45	45	0	5 E	30

Year of study III, Semester VI

\* A project will be developed. **Project** - Group work of 3-5 students of the research problem related to all course units (Fundamental and / or Specialty) in the semester. Passing the examination and awarding study credits is conditional on the MANDATORY defence of the Project.

#### Note:

The planned hours (<u>in all semesters</u>) for Seminars, Laboratory works and Individual study will be done using the Problem Based Learning (PBL) method. Students will carry out research projects developed by the group (3-5 persons) under the guidance of the scientific and didactic staff who hold the courses in the Project module.