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Reforming Master Programmes in Finance in Armenia and Moldova/REFINE

An Erasmus+ Capacity Building Project (2017-2020)

Course Package "Corporate Innovation Systems"

Levitskaia Alla, Dr. (habil.), Associate Professor

General information about the course

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Explanation: Please fill in the table below.

Title of the course (as specified in the reformed curriculum)	"Corporate Innovation Systems"
Name of the teacher	Alla Levitskaia
Novelty of the course (please select as appropriate)	This course is an updated version of a course which includes in the curriculum of MA program "Business and Administration"
Year of the course in the curriculum	1
Semester of the course in the curriculum	2
Language of instruction of the course	Russian, English
Number of ECTS credits	5

Learning outcomes

- **Transversal competencies (General knowledge, skills or competences):**
- TC2. Self-assessment from the perspective of quality concerns, adaptation to new situations/ conditions, openness to novelty and assuming responsibilities, roles and functions of leading the work of professional groups or entities;
- TC3. Identifying personal development opportunities to diversify and enrich professional skills;
- TC4. Communication in a foreign language (English) or know international terms for professional purposes.
- **Professional competencies:**
- PC 1: Creation, design and implementing of strategies, programs and projects, regarding business management using theoretical and practical knowledge;
- PC 2: Apply methods to assess the efficiency of investments through adopt of optimal investment decisions under the risk evaluation;
- PC 3: To develop portfolio of company's innovation management strategies in connection with the external environment and the socio-economic situation;
- PC 4: Work independently or in a team, formulate and develop tasks related to various aspects of financial, investment activities, create effective working relationships and organize teamwork.
  - Cadrul de referinţă al curriculumului universitar / aut.: Nina Bîrnaz, Otilia Dandara, Viorica Goraș-Postică [et al.]; coord.: Vladimir Guțu; Min. Educației al Rep. Moldova. – Chișinău: CEP USM, 2015. – 128 p.

Learning outcomes

1. Summarizing methods of forecasting the development of socio-economic and organizational processes in connection with a modern national and regional innovation concept.
2. Analysing and integrating internal and external data base for the economic calculations and preparation of financial plans for making management decisions.
3. Practical using the methods of Work Breakdown Structure (WBS) planning and organizing work on the introduction of innovations projects.
4. Evaluating enterprises activities and make effective decisions in the field of innovation (or innovation transfer) projects in the practice of organizations.
5. Creating design solutions, taking into account the risk factors considered, as well as proposals and measures for the implementation of the developed projects taking into account the risk factors considered.

Brief summary of course contents

- Discipline Corporate Innovation System pursue the goal of shaping common vision of integration innovation processes on the national, regional and corporation levels.
- This course based on the studying the types of innovations applicable at the enterprise level, the development of innovative policies at the regional level and the country as a whole. Features of this specialty consist in the needs for students to develop professional skills to substantiate of innovation investment projects.
- This course has close links with which courses of the programs: Corporate finance, Strategic Financial Management, Financial risk management. In order to achieve the maximum applied compliance of the proposed course, close cooperation is planned with professional business associations, small and medium enterprises, and corporations. This course includes 7 topics about the Theory of Innovations; concept of the National, Regional and Corporate Innovation Systems; Corporate business processes for managing innovation projects etc.

ADMINISTRATION OF THE DISCIPLINE

Code of discipline of the study plan	Title of the course	Responsible for discipline	Semester	Total hours					Assessment	Number of ECTS credits
				Total	inclusive					
					C	S	L	IW		
S.02.A.07	CIS	Levitskaia Alla	2	150	20	20		50	ex.	5

ORIENTAL TIMETABLE AND ORIENTAL DISTRIBUTION OF HOURS

Nr	Content units	Number of hours per week		
		Lecture	Seminars	Individual Work
1	Theory of innovations	4	4	15
2	Concept of the National Innovation System	2	2	15
3	Development of the regional innovation policy	2	2	15
4	Regional innovation system: in focus UTA Gagauzia	4	4	15
5	Corporate innovation system (CIS)	2	2	15
6	Managing continuous innovation in corporation	2	2	15
7	Corporate business processes for managing innovation projects	4	4	20
Total		**20**	**20**	**150**

Teaching methodology

- **Interactive lectures and seminars.** The CIS module is a semester based module with weekly classes of 4-6 lecturing hours each. Lecture session will handle the most challenging subjects using problem based learning using technical means (Moodle platform https://elearning.kdu.md/moodle/) Lecturer will provide guidance either by explaining the subjects requested by students or by helping them solving the cases and problems. Problem solution and feedback will be provided by fellow students and the lecturer during the class.

- **Independent work** of the undergraduate with educational materials, performance of certification tasks and tests; students are required to do the Class Preparation that consists of: 1) reading the study materials; 2) suggested assignments which could be used to assess understanding of the topic; 3) doing homework reading or business cases preparation.

- **Discussion of questions proposed for independent study** and the results of individual research work in the methods of individual presentations, group conferences and individual counselling including the results of Case study method which allows developing multiple perspectives (to form different groups (3-4 students) to discuss comprehension of the situation). If necessary, the student has the possibility to get a personal teacher's consultation.

Course topics

Main themes

Block 1.

- 1. Theory of innovations.
- 2. Concept of the National Innovation System
- 3. Development of the regional innovation policy
- 4. Regional innovation system: in focus UTA Gagauzia

Block 2.

- 5. Corporate innovation system (CIS)
- 6. Managing continuous innovation in corporation
- 7. Corporate business processes for managing innovation projects (+Case study)

Block 1.
Topic 1. Theory of innovations.

1.1. Definitions and types of innovation.

1.2. Models of innovation process

1.3. Innovation networks.

1.4. Knowledge as input and output of innovation process.

Block 1.
Topic 2. Concept of the National Innovation System

2.1. The state policy in the field of innovation development

2.2. National Innovation System (NIS)

2.3. Regional Innovation System (RIS)

2.4. RIS development problems in the countries with emerging market economies

Block 1.
Topic 3. Development of the regional innovation policy

3.1. Objectives, principles and mechanisms of the development process

3.2. Directions of development of the state innovation policy at the regional level

- 3.2.1. Institutional development
- 3.2.2. Innovation development of economy
- 3.2.3. Development of the Research and Development (R&D) field
- 3.2.4. Development of cooperation between the actors of innovations

3.3. Development of innovation infrastructure of the region

Block 1.
Topic 4. Regional innovation system: in focus
UTA Gagauzia

4.1. Innovation networks

4.2. Innovation potential of business sector

4.3. Business Support Infrastructure

4.4. Clustering processes

Block 2.
Topic 5. Corporate innovation system (CIS)

5.1. Typology of Corporate innovation system (CIS)

5.2. Corporate Innovation Project Structure

5.3. Work Breakdown Structure (WBS)

Block 2.
Topic 6. Managing continuous innovation in corporation

6.1. Basic Innovation Strategies: SDG approach

6.2. Commercialisation of new technologies

6.3. Diversification and internationalisation R&D

6.4. Intellectual Property Right Management

Block 2.
Topic 7. Corporate business processes for managing innovation projects

7.1. Evaluation criteria an innovative project

7.3. Corporate innovation portfolio

7.4. Corporate innovations risks

Labour market relevance

Regional enterprises and professional associations, elements of the innovation infrastructure (industrial parks, business incubators, technology transfer agencies, business support funds, etc.) as potential employers have high innovative activity and play a significant role in the creation new job.

During the meeting with employers at Comrat State University on 12.12.2017, the main stages of the REFINE project were presented. The discussion focused on the recommended to strengthen the knowledge, skills or competences in the field of corporate innovations, relevance of education and training system; tools of financing organizational activity.

The labour market analyses

Main additional competencies and skills that organizations expect from a new employee in the financial sector:

- Risk management
- Risk assessment
- Bankruptcy Diagnosis
- Tax management and analysis
- Tools for innovative projects implementation
- Knowledge of a second language (English)

Assessment and grading

- Diagnostic forms of control, questioning and discussions with students;
- Preparation of abstracts and a presentation on the selected research topic;
- Delivery 2 written tests in the middle (after finishing Block 1st and at the end of the course (after finishing Block 2nd);
- case study elaboration with final presentation
- Preparation for the exam on the approved list of issues.

1. Evaluation of the individual work results

At the end of the course, the average value of *Practical Diagnostic forms (A*) are calculated (including case study elaboration with final presentation and prepared of abstracts on the selected research topic). Maximum number of points is 10.

In the middle at in the end of the course students attend 2 colloquiums (written tests), which includes the studied material. At the end of the course, the *average value of all colloquiums (B)* is calculated.

2. Final assessment - is done through the written exam, using the institutional test, consisting of 2 theoretical questions and 1 task. The maximum number of points for each question is 3 points. The maximum number of points for the task is 4 points. The total maximum points for the exam is 10 (C).

The final grade in the discipline is calculated according to the Academic Performance Evaluation Regulation: Semester grade (60%) + Examination note (40%)

The total points at the end of the course (Y) are calculated using the following formula:

$Y = \frac{A+B}{2}$ x 0,6 + C x 0,4

References

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- Breschi, S. And F. Malerba (1995), Sectoral Innovation Systems. Technological Regimes, Schumpeterian Dynamics and Spatial Boundaries. Paper prepared for the Conference 'Systems of Innovation Research Network', Söderköping, Sweden Sept. 1995.
- Corporate Innovation Systems A Comparative Study of Multi-Technology Corporations in Japan, Sweden and the USA. Ove Granstrand Chalmers University of Technology Industrial Management and Economics, Sweden. January 2000.
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- Levitskaia, A. Technology Transfer Handbook: Moldovan-Estonian cooperation in Technology Transfer by learning good practice. Siemon Smid, Vitalie Moraru, Vitalie Varzari.- Chisinau; Tallin; S.n., 2015 (Tipogr. "Impressium").-84p.
- Government of the Republic of Moldova. Innovation Strategy of the Republic of Moldova for the period 2013-2020 "Innovation for Competitiveness". Chisinau. 2013
- Levitskaia, A. Directions for Development of the State Innovation Policy at the Regional Level. Policy Paper. Project «Increasing the Civic Participation of Youth and Civil Society belonging to National Minorities (2016)». OSCE Mission.

Course assignments

Essays

- Essay have become a major part of formal education and often used as a way of assessing the performance of students during final exams.
- Essay writing allows an author to learn to clearly and correctly formulate ideas, organize information, use the Basic concepts to allocate causal relations, to illustrate the experience of relevant examples to argue their conclusions. The essay must be presented to the audience.

Signs that the essay should have:

- The presence of a specific narrow topic or question
- Strengthening the topic disclosure by expression of individual experiences
- New, subjective opinion and views on a particular subject or issue

An economic essay can start with the formulation of problem an innovation sphere. It can take a narrative and a descriptive type of essay or can even become an argumentative essay if the author feels the need. After the introduction, the author has to do his or her best to expose the economic matter at hand, to analyze it, evaluate it, and draw a conclusion.

The essay must be presented to the audience.

- The essay must be presented to the audience.
- According to the results of the research presented in the essay, a presentation should be developed
- Presentation will be presented at seminars
- It is allowed of group work on the essay and presentation, if the topic is extensive

Case study

Task 1. Discuss the duration of the stages of the project, indicating the links and duration of work.

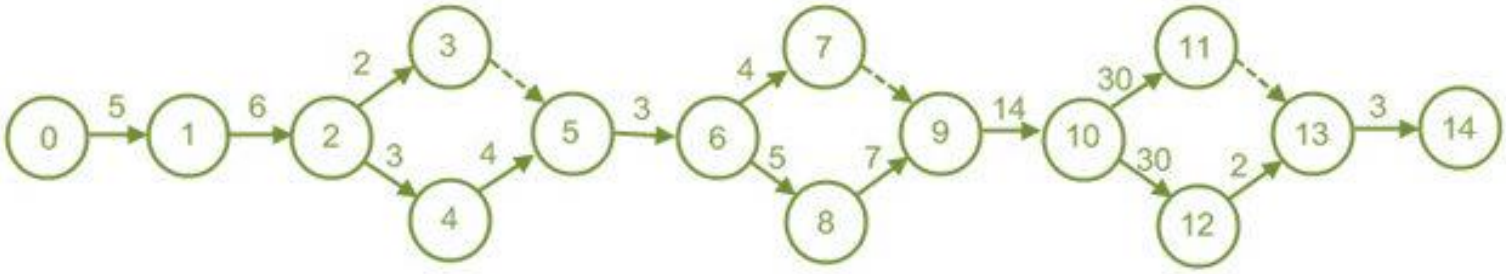
Table 1 - List of project operations

Code	Type of Job	Duration (days)
0-1	Analysis of the relevance of the project	
1-2	Preliminary analysis of the success of the project	
2-3	Defining the overall objectives of the project	
2-4	Determination of the final results	
4-5	Formation of the project team and identification of responsible persons	
5-6	Defining the goals and capabilities of the company	
6-7	Drawing up a project plan	
6-8	Risk assessment	
8-9	Reaching stakeholder agreement	
9-10	Ensuring the mobilization of the necessary resources	
10-11	Performance of work necessary to achieve the main goals	
10-12	Monitoring the performance of work	
12-13	Disbanding the project team	
13-14	Analysis of the results	

Case study

Task 2. Construct Target Network project schedule based on Table 1, shown in Figure 2

Figure 2 - Example of a network project schedule



Case study

Task 3. Build a Gantt graph

Figure 3 - Gantt Graphics Format

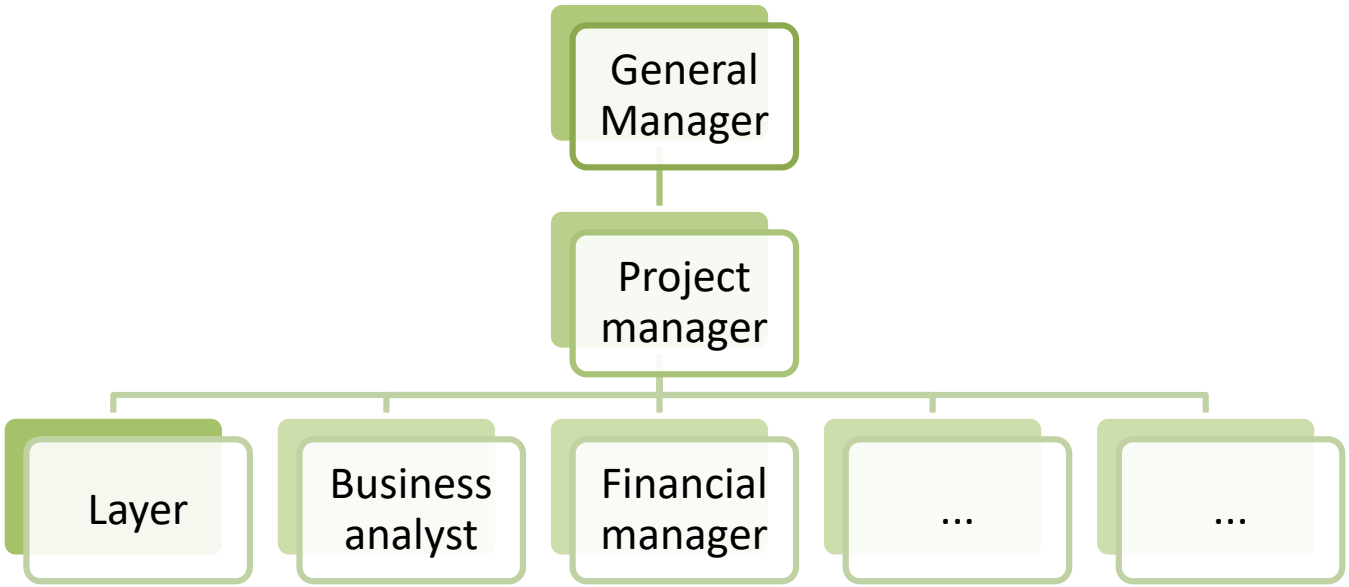
Type of Job	1	2	3	4	5	6	7	8	9	10
1. Initiation of the project										
1.1 Analysis of the relevance of the project										
1.2 Preliminary analysis of the success of the project										
1.3 Defining the overall objectives of the project										
1.4 Definition of final results										
2. Project Planning										
2.1. Formation of the project team and identification of responsible persons										
2.2. Defining the goals and capabilities of the company										
2.3. Drawing up a project plan										
3. Project implementation										
3.1. Risk assessment										
3.2. Reaching stakeholder agreement										
3.3. Ensuring the mobilization of the necessary resources										
3.4. Performance of work necessary to achieve the main goals										
4. Completion of the project										
4.1. Disbanding the project team										
4.2. Analysis of the results										

Case study

Task 4. Develop the organizational structure of the project.

An example of the organizational structure of the project is presented in Figure 4.

Figure 4 - The organizational structure of the project management



Task 5. Develop a project responsibility matrix

Table 2 - Project Responsibility Matrix

Code	Type of job	General Manager	Project Manager	Команда проекта		
				Lawyer	Business Analyst	Other members
0-1	Analysis of the relevance of the project					
1-2	Preliminary analysis of the success of the project					
2-3	Defining the overall objectives of the project					
2-4	Determination of the final results					
4-5	Formation of the project team and identification of responsible persons					
5-6	Defining the goals and capabilities of the company					
6-7	Drawing up a project plan					
6-8	Risk assessment	A	R	C	E	E
8-9	Reaching agreement of the parties	A	R	E	C	E
9-10	Ensuring the mobilization of the necessary resources					
10-11	Performance of work necessary to achieve the main goals					
10-12	Monitoring the performance of work					
12-13	Disbanding the project team					
13-14	Analysis of the results					

* R – Responsible for implementation;
* E – Executor person;
* A – Approval person;
* C – Coordinator.

Thank you for attention!