# MINISTRY OF EDUCATION AND SCIENCE OF UKRAINE SIMON KUZNETS KHARKIV NATIONAL UNIVERSITY OF ECONOMICS

#### "APPROVED"

Deputy Rector (vice-rector for scientific and pedagogical work)

Mykola AFANASIEV

# **Business Process Management**

## syllabus of the academic discipline

Field of knowledge Specialty Education level Educational programs All All second (master's) All

Discipline statusselectiveLanguage of teaching, studying and assessmentenglish

Head of Department Management and Business

Tetyana LEPEYKO

Kharkiv **2020** 

## APPROVED

at the meeting of the Management and Business Department Protocol № 2 of August 27, 2020.

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# Sheet of renewal and re-approval syllabus of the academic discipline

Academic year	Date of the department meeting - developer of the syllabus	Protocol number	Sign of the Head of the department

#### Abstract of the educational discipline

The educational discipline "Business Process Management" belongs to the selective educational disciplines.

It is impossible to increase the efficiency of the Ukrainian economy without seriously reorganizing the principles and mechanisms of enterprise management. The traditional functional approach to management concentrates the attention of management on individual tasks, personnel, structure, while the actual processes of activity often remain out of sight. But business processes of the enterprise create the consumer value of the products, generate a lion's share of the cost, the length of the production cycle and the flexibility of the enterprise depends on the way they are organized. Consequently, effective management of an enterprise requires that it be perceived as a network of business processes performed in a certain sequence.

Purpose of the discipline is formation of the system of theoretical knowledge and applied skills in using the principles, methods and tools for managing business processes of the enterprise.

Characteristics of educational discipline			
Course	1M		
Semester	1		
Number of credits ECTS	5		
Form of final control	Pass		

#### Structural and logical scheme of studying the discipline

Prerequisites	Postrequisites	
Informatics	Graduate design	
Information systems		
Management		
Marketing		

#### **Competences and learning outcomes in the discipline**

Competences	Learning outcomes		
Ability to understand the essence, purpose and role of the process approach in the management of the enterprise	To know the content, principles, advantages and disadvantages of process and functional approaches to management; to classify business processes on different grounds; to substantiate expediency of introduction of process approach to enterprise management		
Ability to simulate business processes	Be able to determine the boundaries of business processes, to describe the business processes by text, tabular and graphical methods, to conduct structural modeling of business processes using CASE-technology, which corresponds to the tasks of modeling		
Ability to implement a business process in the activities of the enterprise	Know the approaches to implementing process management in the enterprise and the stages of this process		
Ability to control the course of business processes of the enterprise	be able to determine the list of indicators for measuring the effectiveness of the business process, be able to assess the strategic importance of the business process, know the process of monitoring the business process		
Ability to improve business processes of the enterprise.	To know the approaches to improving business processes of the enterprise, to know the principles and methods of improving business processes, to know the model of maturity of business processes; to be able to improve business processes		

#### The program of the educational discipline

#### Content module 1. Modeling and implementation of business processes

# Topic 1. The essence of the process approach to enterprise management

Prerequisites and genesis of the formation of a functional approach to enterprise management. Features of the functional approach. The main challenges for modern business. Disadvantages of a functional approach to management in a turbulent client-oriented economy.

The concept of a value chain. Basic and auxiliary activities of the enterprise. The place of the enterprise in the chain of value creation. Supply chain. Model SCOR

The concept of the business process. Properties of the business process. Business process as an object of management. Classification of business processes. The role of the business processes business system in achieving its goals.

The essence of the process approach to enterprise management. The expediency of implementing process management in the enterprise. Goals and tasks of management of business processes. Stages of business process management.

#### **Topic 2. Modeling business processes of the enterprise**

Identification of business processes of the enterprise. Approaches to identifying business processes. The teleological approach to identifying business processes.

The concept of the model. Business process model. Methods of describing business processes. Components of business process models. Principles and techniques of business process modeling. Reference models of business processes.

The concept and essence of CASE-technologies. Overview of business process modeling methodologies. Family of IDEF methodologies. Methodology ARIS. BPMN note.

#### Topic 3. Implementation of business process and process management in general

Approaches to the introduction of process management in the enterprise. Planning and organizing activities for the implementation of the business process. Team for the introduction of process control. Transformation of organizational structure in the implementation of process management.

Regulation of business processes. Structure of the business process regulations.

Contents and tasks of continuous process management. Stages of continuous process management.

#### Content module 2. Analysis and improvement of business processes

#### Topic 4. Measurement and analysis of business processes of the enterprise

Traditional system of managerial control. The role of intangible assets in ensuring the success of the enterprise. The essence of the Balanced Scorecard (LSS). Alternative approaches to the balanced assessment and management of the enterprise. Architecture of ZSP. Stages of LSS implementation. Advantages and disadvantages of LSS.

Procedure for measuring business processes. Key Performance Indicators (CRIs). The logic of forming a CRI system for measuring business processes.

Critical Success Factors. An assessment of the strategic importance of business processes and the priority of their improvement on the basis of critical success factors.

Business Process Analysis. Business Process Analysis Tools.

Managing the costs of business processes. Model for the process distribution of ABC costs.

# **Topic 5. Improvement of business processes of the enterprise**

Basic approaches to improving business processes of the enterprise.

Continuous improvement of business processes. Principles of Deming quality. Shuhart's cycle - Deming. Key concepts of continuous improvement of business processes. Kaizen concept, its advantages and disadvantages. The concept of "six sigmas". Advantages and disadvantages of continuous improvement of processes.

Essence and distinctive features of "breakthrough" improvement of business processes. Characteristics of methods of "breakthrough" improvement of business processes.

Concept of business process reengineering (RBP). Signs of RBP. Main goals and methods of business reengineering. Approaches to conducting RBP. Basic principles of RBP. Reengineering

procedure. Typical results, advantages and disadvantages of RBP.

Model of maturity of business processes.

#### **Teaching and instruction methods**

The main method of teaching the discipline is an explanatory-illustrative method, which is a tool for studying theoretical material, all lectures are presented in the form of presentations using Microsoft PowerPoint. To achieve competencies and learning outcomes, the following methods are also used: discussions, presentations, illustrations, individual group tasks.

#### Assessment system of learning outcomes

University uses a cumulative (100-point) system.

Current control, which is carried out during the semester during lectures, practical, seminar classes and is estimated by the amount of points scored (maximum amount -100 points; the minimum amount that allows a student to get credit -60 points).

final / semester control, which is carried out in the form of semester differentiated credit, according to the schedule of the educational process.

The current assessment of applicants' knowledge takes place during practical and laboratory classes and tasks.

Laboratory classes:

the maximum number of points during Laboratory classes is 30 points. Consists of 6 laboratory works, each work is evaluated with a maximum of 5 points;

writing tests for the course will allow you to get 60 points and provides two tests for 10 points each and two tests for 20 points. The test consists of test and practical tasks on these topics.

Independent work includes search, selection and review of literary sources on a given topic, preparation for tests, individual group tasks, preparation of presentations on the results of laboratory work. The maximum number of points obtained for independent work is 10. The results of independent work are checked and evaluated during the classroom current control – reports, presentations and written works.

**Final / semester control** of students' knowledge and competencies in the discipline is carried out in the form of a semester differentiated test, the task of which is to check the student's understanding of the program material as a whole, logic and relationships between individual sections, ability to creatively use accumulated knowledge. problems of academic discipline, etc.

During the semester control in the form of a differentiated test, the final number of points in the discipline (maximum -100 points) is defined as the sum of (simple) points for the results of the student's success in the current control.

A student should be considered certified if the sum of points obtained as a result of the final / semester examination is equal to or exceeds 60.

Total acore on a 100	ECTS	Assessment on the national scale		
Total score on a 100- point scale	assessment scale	for exam, course project (work), practice, training	for pass	
90 - 100	А	excellent		
82 - 89	В	good		
74 - 81	C		passed	
64 – 73	D	antisfactory		
60 - 63	E	satisfactory		
35 - 59	FX	unsatisfactory	not passed	

Grade scale: national and ECTS

Topic	For	Forms of evaluation	Max points				
	Classroom work						
Topic 1.	Lecture	Topic 1. The essence of the process approach to enterprise management	Participation in the discussion	0			
	Laboratory lesson	Laboratory work on the topic "Building a process model of the enterprise"	The results of laboratory work	5			
		Laboratory work on the topic "Building a business process model by means of functional modeling (IDEF0)"	The results of laboratory work	5			
		Individual work					
	Questions and tasks for the individual work	Search, selection and review of literature on a given topic		0			
		Classroom work		1			
Topic 2.	Lecture	Topic 2. Modeling business processes of the enterprise	Participation in the discussion	0			
	Laboratory lesson	Laboratory work on the topic "Modeling of business processes in eEPC notation"	The results of laboratory work	5			
op		Test work	Test work	10			
F		Individual work					
	Questions and tasks for the individual	Search, selection and review of literature on a given topic, preparation for a test		0			
	work	Presentation of a business model		0			
		Classroom work					
Topic 3	Lecture	Topic 3. Implementation of business process and process management in general	Participation in the discussion	0			
	Laboratory lesson	Laboratory work on the topic "Development of the list of KRI business process"	The results of laboratory work	5			
	Laboratory lesson	Create a survey to survey consumers using the Google form	The results of laboratory work				
		Test work	Test work	20			
	Individual work						
	Questions and tasks for the individual	Search, selection and review of literary sources on a given topic, preparation for					
	work	a test					
	Classroom work						
Topic 4	Lecture	Topic 4. Measurement and analysis of business processes of the enterprise	Participation in the discussion	0			
	Laboratory lesson	Execution of laboratory work on the topic "Improvement of business process"	The results of laboratory work	5			
op		Test work	Test work	10			
Ε	Individual work						
	Questions and tasks for the individual	Search, selection and review of literary sources on a given topic, preparation for					
	work	a test					

# Rating-plan of the educational discipline

Topic	For	Forms of evaluation	Max points			
	Classroom work					
Topic 5	Lecture	Topic 5. Improvement of business processes of the enterprise	Participation in the discussion	0		
	Laboratory lesson	Execution of laboratory work on the topic "Building a business process model in BPMN notation"	The results of laboratory work	5		
		Test work	Test work	20		
	Individual work					
	Questions and tasks for the individual work	Search, selection and review of literary sources on a given topic, preparation for a test				
		Presentation project	Presentation	10		

#### **Recommended books and resources**

#### Main

1. Лепейко Т. І. Реінжиніринг бізнес-процесів : навч. посіб. у схемах і таблицях / Т. І. Лепейко, А. В. Котлик. – Харків : Вид. ХНЕУ, 2009. – 80 с.

2. Text book: Business Process Management / А. В. Котлик, К. Р. Немашкало, // course page on the PNS Simon Kuznets Kharkiv National University of Economics. – Режим доступу: https://pns.hneu.edu.ua/course/view.php?id=612

#### Additional

3. Лепейко Т. І. Процесний підхід до управління конкурентоспро-можністю підприємства : монографія / Т. І. Лепейко, А. В. Котлик. – Харків : Вид. ХНЕУ, 2012. – 316 с.

4. Пономаренко В. С. Теорія та практика моделювання бізнес-процесів : монографія / В. С. Пономаренко, С. В. Мінухін, С. В. Знахур. – Харків : ХНЕУ, 2013. – 243 с.

5. Handbook of research on business process modeling / Ed. by Jorge Cardoso and Wil van der Aalst. – Hershey PA, London : Information Science Reference, 2009. – 607 (XXV) p.

6. Six Sigma + Lean Toolset: Executing Improvement Projects Successfully / Ed. by Stephan Lunau; Translated by Astrid Schmitz. – Berlin : Springer-Verlag, 2008. – 315 (VIII) p.

7. Smith R. F. Business Process Management and the Balanced Scorecard: Using Processes as Strategic Drivers / Ralph F. Smith. – Hoboken, New Jersey : John Wiley & Sons, 2007. – 228 (X) p.

#### **Information resources**

8. «Бизнес-инжиниринговые технологии». Company website – Access mode : http://www.betec.ru.

9. «Инталев»Company website. – Access mode : http://www.intalev.ru.

10. ARIS community website [Electronic resource]. – Access mode : http://www.ariscommunity.com.

11. Business Process Model and Notation [Electronic resource]. – Access mode : http://www.bpmn.org.

12. IDEF, Integration DEFinition methods [Electronic resource]. – Access mode : http://www.idef.com.

13. Kotlyk A. Business Process Management // course page on the PNS Simon Kuznets Kharkiv National University of Economics. – Режим доступу: https://pns.hneu.edu.ua/course/view.php?id=612