

MINISTRY OF EDUCATION AND SCIENCE OF UKRAINE
National Aviation University
Faculty of Economics and Business Administration
Management of Foreign Economic Activity of Enterprises Department

APPROVED
Acting Rector

« ____ » _____ 2018



Quality Management System

SYLLABUS

on

“Information Systems in Management”

Field of study: 0306 "Management and Administration"
Major: 6.030601 "Management"

Year of Study – 3^d

Semester – 5th

Classroom Sessions – 34
Self-study – 56

Graded Test – 5th semester

Total (hours/ECTS credits) – 90/3.0

Index C-6-6.030601/15-5.30

QMS NAU S 11.02.03-01-2018



The Syllabus on “Information Systems in Management” is based on the educational and professional program Bachelor Curriculum № CB-6-6.030601/15 for major 6.030601 “Management” and correspondent normative documents.

Developed by:

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Discussed and approved by the Graduate Department for Major 6.030601 “Management” –
Management of Foreign Economic Activity of Enterprises Department, Minutes № ___ of " ___ "
_____ 2017.

Head of the Department _____ O.Ilienko

The Syllabus discussed and approved by the Scientific-Methodological-Editorial Board of
the Educational and Research Institute of Economics and Management, Minutes № ___ of " ___ "
_____ 2017.

Head of the SMEB _____ A. Tofanchuk

AGREED

Director of the Educational and
Research Institute of Economics
and Management

_____ S. Petrovska
« ___ » _____ 2017

Director of the Center
of Advanced Technologies _____ V. Kazak

Document level – 3b

The planned term between the revisions – 1 year

Master copy



1. Explanatory note

The curriculum of the academic discipline was "Information Systems in Management" developed on the basis of "Methodological Guidelines for the Development and Design of Educational and Working Curriculum Programs of the disciplines", enacted by the order of 16.06.2015. №37 / pp.

This discipline is the theoretical basis of the totality of knowledge and skills that form the profile of a specialist in the management of foreign economic activity of enterprises.

The purpose of teaching discipline is the disclosure of modern scientific concepts, models, methods and technologies of information provision of management and research of the basic theoretical foundations of the construction and use of computer information systems as means of automation of information management support.

The tasks of studying the discipline are:

- mastering technological bases of information management;
- research of information processes in the enterprise management system;
- research of the basic approaches to application of information systems and technologies in modern business;
- mastering the methods of evaluation of the implementation and functioning of information systems in management.

As a result of studying the discipline, the student must:

Know:

- regularities of formation of informational support of management activity;
- conceptual foundations of the construction and functioning of information systems in management;
- methods of formalizing management information;
- general technological aspects of the use of modern information technologies in the information management of the management;
- methods of economic analysis of the implementation and functioning of information systems.
- independently determine the composition and structure of information provision of management activity depending on the basic model of management;
- independently determine the conceptual foundations of the construction and functioning of information systems in management;
- independently establish the relationships of basic management models with certain types of computerized information systems;

Be able:

- independently determine the main information cycles, which involves the technological scheme of the management process;
- to independently classify management information, depending on its role in the management process;
- to independently characterize the requirements for the quality of managerial information;
- independently determine the criteria for assessing information in accordance with the directions of overcoming information noise.

The educational material of the discipline is structured modularly and consists of one training module, namely:

Training module №1 "Information systems in management", which is a logically complete, relatively independent, integral part of the curriculum, the assimilation of which involves modular control work and analysis of the results of its implementation.

The discipline "Information Systems in Management" is based on the knowledge of such disciplines as: "Labor Law", "Management Controlling" and is the basis for studying such disciplines as: "Organizational Behavior", "Modeling Management Solutions" and others.

2. CONTENT OF EDUCATIONAL DISCIPLINE

2.1. Module №1 "Information Systems in Management"

Topic 1.1. Information and Information Society.

Components of the process of information circulation. The main properties of information related to its fixedness on physical media. Information and information systems. Effectiveness of information. Concept of information society. The main features of the information society. Information systems and modern aspects of economic development.

Topic 1.2. Information interactions in the management system of an organization. Quality management information.

Objects and subjects of management as participants of information interaction. Principles of functioning of adaptive systems. Actual and effective management information. Types of management information. Requirements for management information quality. Information culture. Organizational and individual informational culture.



Topic 1.3. Communication in management.

Standard communication model. The process of information exchange as a feedback and noise system. Communication channels, efficiency of management communication channels, expediency of use. Descending, ascending and horizontal organizational communications. Factors influencing the effectiveness of organizational communications. Management of organizational communications. Human factor in filtering management information. Scripts of personal communications. Individual factors affecting the effectiveness of communications.

Topic 1.4. General concepts of building information systems in management.

Goals, the task of information management systems. The overall structure of information management systems. Functions and information management systems. Structure of information support of information management systems.

Types of information technologies of information and organizational management cycles. Classification of information technology. Means of computer communications. Technological capabilities of modern decision support systems. Interaction of business structures and information technologies. Model of J. Henderson.

Topic 1.5. Integrated information management systems focused on the internal and external environment of the organization.

MRP Management Model - Planning production needs in materials. MRP Management Model II- Production Resource Planning. ERP Management Model - Enterprise Resource Planning.

CSRP Concept. Integration and synchronization of buyer information with the main functions of the enterprise using CSRP-systems.

Topic 1.6. Formalization of information provision of information systems in management.

General principles of organization of information support of information systems in management. The logical and physical structure of data provision of information systems. Hierarchical and facet type management information classification methods. Sequential encoding based on hierarchical classification. Parallel encoding based on the facet classification.

Topic 1.7. Economic efficiency of implementation and functioning of information systems.

Economic analysis of the implementation and operation of information systems. Evaluating the effectiveness of information systems implementation projects using the Balanced Scorecard Method.

Methods of financial and economic evaluation of investment projects implementing information systems. Management of the total cost of ownership of information systems.

Topic 1.8. Prospects for the development of information technology and information systems in management.

Strategy of Information Technology Development and IT Infrastructure. The main factors influencing the development of information management systems. Corporate knowledge management.

Information systems in the processes of management of civil aviation enterprises. Information character of the process of organizing the sale of airline services. Computer systems for booking and selling air transportation on domestic and international air lines.

3. LIST OF REFERENCES

3.1. Basic literature

3.1.1. Новак В.О., Макаренко Л.Г., Луцький М.Г. Інформаційне забезпечення менеджменту: Навч. посібник. – К.: Кондор, 2006. – 462.

3.1.2. Новак В.О., Матвеев В.В., Бондар В.П., Карпенко М.О. Інформаційні системи в менеджменті: Підручник. 2-е вид. – К.: Каравела, 2010. – 536с.

3.2. Additional literature

3.2.1. Ананьєв О. М., Білик В. М., Гончарук Я. А. Інформаційні системи і технології в комерційній діяльності: Підручник. – Львів: Новий Світ-2000, 2006. – 584с.

3.2.2. Білик В.М., Костирко В.С. Інформаційні технології та системи: Навчальний посібник. - Київ: Центр навчальної літератури, 2006. - 232 с.

3.2.3. Василюк Б. В. Інформаційні системи в менеджменті: Інтерактивний комплекс навчально-методичного забезпечення. – Рівне: НУВГП, 2008. – 167 с.

3.2.4. Новаківський І. І., Грибик І. І., Федак Т.В. Інформаційні системи у менеджменті: системний підхід: Навчальний посібник. –Львів: Львівська політехніка, 2010. – 260 с.

3.2.5. Осовська Г. В. Комунікації в менеджменті: Навч. посібник. – К.: Кондор, 2008. – 214 с.

3.2.6. Селіверстов Р. Г. Опорний конспект лекцій з дисципліни "Інформаційні системи в менеджменті". – Львів: ЛРІДУ НАДУ, 2008. – 46 с.



(Ф 03.02–01)

АРКУШ ПОШИРЕННЯ ДОКУМЕНТА

№ прим.	Куди передано (підрозділ)	Дата видачі	Прізвище, ім'я та по батькові отримувача	Підпис отримувача	Примітки

(Ф 03.02–02)

АРКУШ ОЗНАЙОМЛЕННЯ З ДОКУМЕНТОМ

№ з/п	Прізвище, ім'я та по батькові	Підпис ознайомленої особи	Дата ознайомлення	Примітки

(Ф 03.02 – 04)

АРКУШ РЕЄСТРАЦІЇ РЕВІЗІЇ

№ пор.	Прізвище ім'я по-батькові	Дата ревізії	Підпис	Висновок щодо адекватності

(Ф 03.02–03)

АРКУШ ОБЛІКУ ЗМІН

Номер	Номер/сторінки (пункт)				Підпис особи, щовнесла зміну	Дата внесення зміни	Дата введення зміни
	зміненого	заміненого	нового	анульованого			

(Ф 03.02 – 32)

УЗГОДЖЕННЯ ЗМІН

	Підпис	Ініціали, прізвище	Посада	Дата
Розробник				
Розробник				
Узгоджено				
Узгоджено				
Узгоджено				