



SYLLABUS "INTEGRATED MANAGEMENT SYSTEMS"

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Department responsible for the course or equivalent: Institute of Management in Economic, Ecological and Social Systems; Department of Management and Innovative Technologies

Semester when the course unit is delivered: 1st

Level of course unit: Master's level

ECTS credits: 4

ADMISSION REQUIREMENTS

Applicants are expected to have completed the following courses:

- Modern Management Technologies;
- English (advanced level).

COURSE OBJECTIVES (AIMS)

- to know modern approaches to the management of corporate information systems;
- to be able to form the concept of the enterprise information system and its effective use in commercial activities;
- to master the conceptual and terminological apparatus used in the management of corporate information systems;
- to know the features of modern financial and economic, managerial, legal corporate information systems;
- to form an idea of current trends and current problems in the field of corporate information systems management.

COURSE CONTENTS

Module 1. The role of integrated management systems in the enterprise's activity.

Session 1. Basic concepts and definitions of integrated management systems. The concept of economic information. Types of economic information. Structure of economic information. Properties of economic information. Information resource. Information process. Information flows of the enterprise. The role of information in business support.



Session 2. Structure, classification, and functional tasks of integrated management systems. Classification of integrated management systems. Classification of integrated management systems by management levels, by the scope of the object of management, by functional structure, by organizational structure, by use boundaries, by degree of integration, by information technology architecture, by specialization.

Session 3. Architecture and implementation of integrated management systems. Causes and consequences of the complexity of the integrated management systems structure. Monolithic architecture. Two-level architecture. Three-level architecture. Composition of multi-level architecture and frameworks. The impact of Internet development on changing the principles of integrated management systems' organization.

Session 4. Business process reengineering and methods of its implementation. Characteristics of the main changes to the organization. Methods of business process reengineering: collecting information from experts; modeling of business processes; discussion of the project by the method of "brainstorming storm"; using CASE-technologies for developing information systems and preparation of project documentation; training of company personnel.

Session 5. Integrated management systems: modeling, design, and programming. Life-cycle of the integrated management systems. Integrated management systems modeling, design, and programming. Mathematical tools for Data Mining method.

Module 2. Integrated management subsystems.

Session 6. Bank automated information systems. The automated systems of the stock market. Bank automated information systems. Principles of creating automated banking systems, problems of their development. Infrastructure of the Bank's automated information system. Automation of international banking payments. The automated system of the stock market. Type of securities. Primary and secondary securities markets. The functions of the stock market. Technical indicators of the stock market. Stock index. Information support for the securities market. Distributed depository system, problems and solutions. Automation of stock trading.

Session 7. Management automated information systems. Electronic document management systems. Legal information systems. Management automated information systems. The concept of integrated management. Basic concepts of documentation support for management activities. Types of information systems for managing enterprise documentation. Organization of an electronic document management system. Legal information system.

Session 8. Automation of work with personnel. The peculiarities of the tasks of personnel management. Principles of building corporate information systems for



personnel management. Integrated management system's modules .The role and tasks of the Internet in the employment system.

Session 9. Economic aspects of efficiency from the implementation of information systems. Economic aspects of efficiency from the introduction of information systems.

LEARNING OUTCOMES

Knowledge:

- of modern approaches to the management of corporate information systems; the features of modern financial and economic, managerial, legal corporate information systems.

Abilities:

- to form the concept of the enterprise information system and its effective use in commercial activities; to form an idea of current trends and current problems in the field of corporate information systems management.

Skills:

- mastering the conceptual and terminological apparatus used in the management of corporate information systems.

PLANNED LEARNING ACTIVITIES AND TEACHING METHODS

Educational technologies used in the study of the discipline provide for the use of active and interactive forms of classes in the educational process, namely:

- method of problem presentation of the material, both by the lecturer and the student;
- independent reading by students of educational, methodical and reference literature and subsequent free discussions on the material they have mastered;
- use of illustrative material focused on the use of multimedia presentation equipment;
- preparation for practical classes;
- preparation of individual tasks based on the proposed examples.

When submitting lectures and practical material, electronic and multimedia means of presenting information on the course are used (electronic version of the lecture notes, presentations for lectures and material for individual works).

When implementing educational work, such types of active and interactive forms of classes are used, such as participation in lectures and discussions, individual tasks.

The lecture course contains mainly theoretical material that reflects the current state of scientific concepts on this topic and is supported by explanations and comments on specific application examples of implementation.



Practical classes are held in the form of analysis of practical examples, discussion of typical problem situations and testing.

Independent work is aimed at developing an understanding of the application of the materials considered in the framework of the theoretical course in the practical aspect when solving professional tasks.

Forms of control: written survey, individual tasks, testing.

Intermediate certification: exam.

ASSESSMENT METHODS AND CRITERIA

Evaluation criteria:

Written survey

The maximum number of points that a student can get for one such task in each module is 10.

- Rating 8-10 points will be billed to the student if prepared a detailed response to the prepared questions the relevance of the issue, the problems and themes, the learners' opinion reasoned, conclusions and recommendations. The correct answers to questions are given.

- Grade 6-8 points exhibited a student if prepared a detailed response to the prepared questions the relevance of the issue, the problems and themes, the learners' opinion reasoned, conclusions and recommendations, however, the answers to the questions of the teacher unreasoned and inadequate.

- A score of 4-6 points is given to the student if the answer to the questions is prepared, the relevance of the question, problem and topic is formulated, but the student's opinion is not sufficiently reasoned, incomplete conclusions and recommendations are made. The answers to the teacher's questions are undocumented and insufficient.

- Rating 3-6 points the student is exposed if the prepared response to the questions insufficiently formulated the relevance of the issue, problem and topics, the learners' opinion insufficiently reasoned, made incomplete conclusions and recommendations. The answers to the questions do not correspond to the subject of the question.

- Score 0-3 points is assigned to the student if the answer to the question is not prepared, or the answers given to them do not reveal the essence of the questions and the problem. The student is not able to draw reasonable conclusions. The answers to the teacher's questions are not given to the students.

Individual tasks

The maximum number of points is 10 (1 per module).

- Score 9-10 points: The problem is clearly identified and its relevance is justified, the goal is formulated, and the research tasks are defined. The analysis of the problem with the involvement of several sources of literature, logically stated their own position, formulated conclusions, the topic is fully disclosed, links to



sources from the list of references are indicated. The student demonstrates a complete understanding of the problem described, correct answers to all questions on the topic are given.

- Score 6-8 points: The problem is not clearly defined, there is a justification for its relevance, the goal is formulated, and the research tasks are defined. The analysis of the problem with the involvement of several sources of literature, logically stated their own position, formulated conclusions, the topic is fully disclosed, links to sources from the list of references are indicated. The student demonstrates a significant understanding of the problem, not all questions are answered, or the answers are incomplete

- Score 3-5 points: The relevance of the problem is not sufficiently substantiated, the purpose and objectives of the study are not formulated. The analysis of the problem was carried out on a single source of literature, there are no conclusions, the topic is not fully disclosed. The student demonstrates a partial understanding of the problem, answers only basic questions.

- Score 0-2 points: There is clearly no justification for the relevance of the problem, the purpose and objectives of the study. The topic is not disclosed, and the requirements for the task are not met. The student demonstrates a lack of understanding of the problem, no answers to questions or incorrect answers.

Test

The test results are evaluated using a point system (0,5 points for each correct answer to a question). Number of points for 2 modules on tests: up to 20 points (for each module up to 10).

9-10 - The percentage of points received from their total number is equal to or exceeds 85% (excellent);

7-8- The percentage of points gained from their total number is in the range from 65 to 84% (good);

6 - The percentage of points received from their total number is in the range from 55 to 64% (satisfactory);

0-5 - The percentage of points received from their total number is less than 55% (unsatisfactory).

Exam

The maximum score for an exam is 40 points.

Part 1-written answer (20 points) for answers to 2 questions in the ticket (10 points for 1 question).

Part 2-oral answer (20 points) to questions (10 points for 1 question).

An “excellent” grade is given to a student, if he demonstrates full understanding of the issue mentioned in the questions.

A “good” grade is given to a student, if he demonstrates high understanding of the issue mentioned in the questions. There are some inaccuracies in the answer. A total “good” grade is also given for examination, if a student gives an “excellent”



grade for one question, and he gives a “satisfactory” grade for answering the second question.

A “satisfactory” grade is given to a student, if he does not demonstrate full understanding of the issue mentioned in the questions. There are significant inaccuracies in the answer. A total “satisfactory” grade is also given for examination, if a student gives a “good” grade for one question, and he gives a “satisfactory” grade for answering the second question. If a student answers one question with an “excellent” grade, and he does not answer the second question, an “unsatisfactory” grade is given.

An “unsatisfactory” grade is given to a student, if he demonstrates lack of understanding of the issue. There is no answer to the questions. A student’s answer is not associated with a topic given in the question.

COURSE LITERATURE (RECOMMENDED OR REQUIRED)

1. Kurbesov A.V. Corporate information systems: textbook / A.V. Kurbesov; Ministry of education and science of the Russian Federation; Rostov state University of Economics (RINH) - Rostov-on-don: Publishing and printing complex of RSEU (RINH), 2018. - 122 p. <http://biblioclub.ru/index.php?page=book&id=567042>
2. Nikitaeva A. Yu. Corporate information systems: textbook / A. Yu. Nikitaeva, O. A. Chernova, M. N. Fedosova; Ministry of education and science of the Russian Federation; southern Federal University-Rostov-on-don / Taganrog: Southern Federal University press, 2017. - 149 p. <http://biblioclub.ru/index.php?page=book&id=493253>
3. Matyash S. A. Corporate information systems / S. A. Matyash-M. / Berli N.: Direct-Media, 2015. - 471 p. <http://biblioclub.ru/index.php?page=book&id=435245>
4. Kurganova E. V. Basics of using Baan ERP 5.0 p. Corporate information system. Textbook on the course, guide to the study of the discipline, practical training in the discipline, tests in the discipline, curriculum in the discipline / E. V. Kurganova-Moscow: Moscow state University of Economics, statistics and Informatics, 2004. - 235 p.
5. Romanenko M. G. Analysis and optimization of business processes: a course of lectures / M.G.Romanenko-Stavropol: NCFU, 2016. - 154 p. <http://biblioclub.ru/index.php?page=book&id=459242>
6. Garipova, G. R. Information support for logistics business processes. - Kazan: Kazan scientific research technological University (KNITU), 2018. - 144 p. <http://biblioclub.ru/index.php?page=book&id=500853>