



# SYLLABUS"INFORMATION TECHNOLOGIES IN PROFESSIONAL ACTIVITY"

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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:7st

Level of course unit: Bachelor level

**ECTS** credits: 5

#### **ADMISSION REQUIREMENTS**

Applicants are expected to have completed the following courses:

- Computer science;
- Logistics.

## COURSE OBJECTIVES (AIMS)

- to know the composition, functions and specific capabilities of information technologies; the main methods and means of storing, searching, systematization, processing, and transmission of information; the composition, functions and specific capabilities of application software tools in professional activities.
- to apply information and communication technologies to solve various professional tasks, to search for information in computer systems;
- to apply tools of professionally-oriented information and search systems to solve professional tasks;
- to use methods and tools to ensure information security;
- to work with various types of professionally-oriented Internet resources.
- to use tools of application programs for solving professional tasks;
- to work with information search systems used in professional activities;
- to have skills in safe operation and protection of information in computer systems and networks.

#### **COURSE CONTENTS**

Module 1. Basics of information technologies in professional activity
Session 1. Information and knowledge in business. Discussion of the concepts of information, knowledge, business information and its types and role in the organization.





- **Session 2.** Information resources of organizations. Classification and types of enterprises' information resources.
- **Session 3.** Professional information search engines (legal databases). Legislation in the field of professional information search engines. Classification and types of legal databases.
- **Session 4.** Computer systems for information exchange in professional activities. Types of information systems. Information protection.
- Module 2. Methodological tools for implementation of information technologies in professional activity
- **Session 5.** Technologies for searching and analyzing information in legal reference systems. Legal reference system "Consultant plus". Legal reference system "Garant". Types of search and analytics of legal reference system "Garant".
- **Session 6**. Technologies and systems for preparing text documents. Basic techniques and skills of working in the text editors. Creating document templates. Style markup of the text.
- **Session 7**. Technologies for processing and analyzing table document data. Tables calculations, formatting tables and the chart wizard.
- **Session 8**. Technologies for the preparation of computer presentations. Preparing presentations using style design, animation effects and object placement.
- **Session 9**. Technologies of joint (collective )work. Cloud technologies and their application for collective work on documents.

#### LEARNING OUTCOMES

**Knowledge**: of the composition, functions and specific capabilities of information technologies; the main methods and means of storing, searching, systematization, processing, and transmission of information; the composition, functions and specific capabilities of application software tools in professional activities.

**Abilities:** to apply information and communication technologies to solve various professional tasks; to search for information in computer systems; to apply tools of professionally-oriented information and search systems to solve professional tasks; to use methods and tools to ensure information security; to work with various types of professionally-oriented Internet resources.

**Skills:** using tools of application programs for solving professional tasks; to work with information search systems used in professional activities, as well as skills in safe operation and protection of information in computer systems and networks.

#### 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 for laboratory work;
  - 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 (electronic version of the lecture notes, presentations for lectures) are used.

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 on the course include elements of an interactive problemoriented approach to learning by focusing students' attention on the analysis and resolution of specific management tasks.

Practical classes are held in the form of a seminar, which involves:

- presentations of students with pre-prepared reports on problem-oriented topics formulated by the teacher, after which the audience discusses their level and, if necessary, the answers are supplemented, or their shortcomings are noted under the guidance of the teacher leading the lesson;
  - testing.

Laboratory classes on the course involve solving practical problems related to management problems. Students are given a task to analyze the situation and offer a solution (several solutions are possible). This contributes to the development of various types of competencies in the process of making managerial decisions.

Forms of control: written survey, report, checking laboratory work, testing.

### 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.

# **Reports**

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.

## **Laboratory works**





The maximum number of points that a student can get for performing laboratory work in each module is 10 points. Each laboratory work is rated at 2 points.

- A score of 2 points is given to the student if a detailed answer to the questions of the laboratory work is prepared, conclusions are made, and recommendations are given. Correct answers to questions are given.
- A score of 1,5 points is given to the student if a detailed answer to the prepared questions of the laboratory work is prepared, conclusions and recommendations are made, but the answers to the questions of the teacher are not documented and insufficient.
- Score 1 point 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.
- Evaluation of 0,5 points will be billed to the student 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.
- A score of 0 points is assigned to the student if the laboratory work 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.

## Test

The test results are evaluated using a point system (1 point for each correct answer to a question).

The number of points for 2 modules on tests: up to 40 points (for each module up to 20 points).

- 18-20 The percentage of points received from their total number is equal to or exceeds 85% (excellent);
- 14-17- The percentage of points gained from their total number is in the range from 65 to 84% (good);
- 9-13 The percentage of points received from their total number is in the range from 55 to 64% (satisfactory);
- 0-8 The percentage of points received from their total number is less than 55% (unsatisfactory).

## Credit

The maximum number of points that a student can get for a discipline in the semester is 100. The minimum number of points at which the discipline should be credited is 60.





- the rating "passed" (60-100 p.) is given to the student if he owns the material and responds well to the control and additional questions.
- the score "not passed" (0-60 p.) is assigned to the student if he does not own the material, or does not answer the control questions.

The rating for the discipline consists of the points obtained as a result of current and boundary control. The final assessment of the development of competencies in the subject is determined as the sum of points awarded for the controlled sections of the discipline.

# COURSE LITERATURE (RECOMMENDED OR REQUIRED)

- 1. Lebedev .I. Informatics: source of lectures in english. - Stavropol: North Caucasus Federal University (KFU), 2015. 101 p. <a href="http://biblioclub.ru/index.php?page=book&id=457402">http://biblioclub.ru/index.php?page=book&id=457402</a>
- 2. Lebedev V. I., Lebedeva I. V. Informatics. Laboratory workshop on English language. Stavropol: North Caucasus Federal University (NCFU), 2018. 153 p. http://biblioclub.ru/index.php?page=book&id=494708
- 3. Schwalbe K. Information Technology Project Management. Cengage Learning, 2015. 643 p. ISBN-13: 978-1-285-45234-0 <a href="https://www.pdfdrive.com/information-technology-project-management-d168123166.html">https://www.pdfdrive.com/information-technology-project-management-d168123166.html</a>
- 4. Advertising and Branding: Concepts, Methodologies, Tools, and Applications. Information Resources Management Association, 2016. 1849 P  $\cdot$  2016. https://www.pdfdrive.com/advertising-and-branding-concepts-methodologies-tools-and-applications-d187577321.html
- 5. Mehdi Khosrow-Pour. Encyclopedia of Information Science and Technology, Fourth Edition. Information Resources Management Association USA, 2018. 8357 p. https://www.pdfdrive.com/encyclopedia-of-information-science-and-technology-fourth-edition-e158255672.html