

## Work programme of the discipline:

<b>Course title</b>	<b>RESEARCH METHODOLOGY</b>
<b>Level of higher education (degree)</b>	FIRST (BACHELOR)
<b>Field of study</b>	07 MANAGEMENT AND ADMINISTRATION
<b>Major</b>	073 MANAGEMENT
<b>Program subject area</b>	MANAGEMENT (ENGLISH)
<b>Status of the discipline</b>	Compulsory
<b>Mode of studies</b>	FULL-TIME, PART-TIME, E-LEARNING
<b>Total number of hours/ ECTS credits</b>	150 HOURS /5 ECTS CREDITS
<b>Language of instruction</b>	ENGLISH
<b>Lecturer</b>	DENYSOV OLEG EVGENIYOVICH ASSOC. PROF., DOCTOR OF ECONOMIC SCIENCES.
<b>Lecturer's profile</b>	<a href="https://www.krok.edu.ua/ua/pro-krok/pidrozdili/navchalni/kafedra-mizhnarodnoho-biznesu">https://www.krok.edu.ua/ua/pro-krok/pidrozdili/navchalni/kafedra-mizhnarodnoho-biznesu</a>
<b>Tel. number</b>	+380674455570
<b>E-mail</b>	OlegDe@krok.edu.ua
<b>Consultations</b>	CONSULTATIONS IN MS TEAMS: FRIDAY, 11:00 A.M.-11.30 A.M.

### 1. Brief summary of the course

The course is designed to equip aspiring entrepreneurs with the essential skills and knowledge needed to effectively launch and manage their businesses.

This course provides comprehensive coverage of fundamental concepts and critical issues associated with investigation. It emphasizes the key skill set that successful entrepreneurs should possess, as well as the vital components of an entrepreneurial ecosystem.

The course focuses on the processes required to transform innovative ideas into actionable results, highlighting the importance of critical and creative thinking in adding value. Additionally, management accountants should maintain an unwavering commitment to ethical values while using their knowledge and skills to influence decisions that create value for organizational stakeholders. The course also explores the role of leadership in fostering a successful start-up, while examining innovative business models in both established and emerging markets.

## 2. Learning outcomes

### General Competencies (GS):

- GS 3.** Ability for abstract thinking, analysis, synthesis  
**GS 9.** Ability to learn and master modern knowledge.  
**GS 10.** Ability to conduct research at an appropriate level.

### Professional Competencies (PC):

- PC 2.** Ability to analyze the results of an organization's activities, compare them with factors influencing the external and internal environment.  
**PC 7.** Ability to select and use modern management tools.  
**PC 10.** Ability to evaluate work performed, ensure its quality and motivate the organization's staff.

### Program learning outcomes (PLO):

- PLO 6.** Demonstrate skills in searching, collecting and analyzing information, calculating indicators to substantiate management, innovation and investment decisions.  
**PLO 16.** Demonstrate skills of independent work, flexible thinking, openness to new knowledge, and be critical and self-critical.

## 3. Course scope

Type of class	Total number of hours/ ECTS credits - 150 HOURS /5 ECTS CREDITS		
	full-time	part-time	e-learning
lectures	28	14	14
seminars / practical / laboratory classes	22	7	7
Individual work	100	129	129

## 4. Prerequisites

There are no prerequisites for this course.

## 5. Hardware and software

PC / laptop, Internet access, camera, microphone

## 6. Course policies – students must adhere to a code of academic integrity:

<https://int.krok.edu.ua/images/download/code-of-academic-integrity-2025.pdf>

Academic integrity is the presentation of one's own work and the proper recognition of the contribution of others.

Any violation of this principle constitutes academic dishonesty and may result in poor evaluation and disciplinary action.

### Forms of academic dishonesty include:

- Plagiarism - presenting all or part of someone else's work as one's own in an academic exercise, such as an exam, a computer program, or a written assignment.
- Fraud - Using or attempting to use unauthorized materials during an exam or assignment, such as using unauthorized texts or notes or improperly obtaining (or attempting to obtain) a copy of an examination or exam answers.
- Promoting academic dishonesty - helping others commit an act of dishonesty, such as replacing an exam or completing a task for someone else.
- Fabrication - modification or transfer, without permission, academic information, or records.

## **7. Programme of the course**

### **Topic 1: INTRODUCTION TO RESEARCH**

Subject of study of the discipline "Research Methodology: Quantitative and Qualitative Methods", its place in the system of professionally oriented disciplines. Relevance and practical orientation of the discipline, its structure and teaching methods. Information support of the discipline.

The concept of research methodology (RM). Principles of RM. The main factors of influence of RM on economic activity in modern conditions.

Science: essence, subject and functions. Classification of sciences. Levels of scientific knowledge.

The meaning of research. Types of research. Exploratory research. Final research.

The research process: scientific applications in social and business sciences.

Features of qualitative scientific research.

### **Topic 2: RESEARCH PROBLEM AND FORMULATION OF THE RESEARCH HYPOTHESES**

Scientific method and methodology. Subject, object and subject of scientific research.

Definition of the research problem. The problem of management decisions as a problem of management research. The process of identifying the problem.

Components of the research problem. Formulation of research hypotheses. Types of research hypotheses.

Writing a research proposal. Content of a research proposal. Types of research proposals.

### **Topic 3: RESEARCH DESIGNS**

Structure and design of research: the meaning of research structures.

The essence and classification of scientific structures;. Structure of research: analysis of secondary resources, case study method, survey of expert opinions, focus group discussions.

Structure of descriptive research: cross-sectional studies and longitudinal studies.

Experimental designs, errors that occur when designing them.

### **Topic 4: PRIMARY AND SECONDARY DATA**

Data classification. Secondary data. Use of secondary data. Advantages and disadvantages of secondary data.

Types and sources of secondary data. Primary data collection: observation method.

Primary data collection: focus group discussion. Primary data collection: personal interview method.

### **Topic 5: ATTITUDE MEASUREMENT AND SCALING**

Types of measurement scales. Comparison. Classification of scales. Single-item versus multiple-item scales.

Comparative and non-comparative scales. Measurement error.

Criteria for qualitative measurement.

### **Topic 6: QUESTIONNAIRE DESIGN**

Questionnaire method. Types of questionnaires.

The process of developing a questionnaire.

Advantages and disadvantages of the questionnaire method.

#### **Topic 7: SAMPLING**

The concept of sampling for research. Sampling in the census.

Sampling error versus non-sampling. Data structure for sampling. Probability sampling structure.

Impossible sampling designs. Determining sample size. Sample size for estimating the population mean.

Determining sample size for estimating the population proportion.

#### **Topic 8: DATA PROCESSING**

Data editing. Field editing. Centralized internal editing.

Coding.

Coding closed-ended structured questions. Coding open-ended structured questions.

Classification and tabulation of data.

#### **Topic 9: UNIVARIATE AND BIVARIATE ANALYSIS OF DATA**

The essence of descriptive inferential analysis. Descriptive analysis. Inferential analysis. Descriptive analysis of univariate data.

Analysis of nominal scale data with a single possible answer. Analysis of nominal scale data with multiple category answers.

Analysis of ordinal questions by scale. Measures of central tendency. Measures of dispersion.

Descriptive analysis of bivariate data.

#### **Topic 10: TESTING OF HYPOTHESES**

Concepts in hypothesis testing. Stages of hypothesis testing.

Test statistics for testing a hypothesis about a population mean.

Tests for means - in the case of a single population. Tests for the difference between two population means.

Tests for population proportion - in the case of a single population. Tests for the difference between two population proportions.

#### **Topic 11: CHI-SQUARE ANALYSIS**

The essence of the Pearson Chi-square analysis method. Chi-square test for independence of variables.

Chi-square test for equality of data.

Hypothesis testing using Pearson Chi-square criteria.

#### **Topic 12: ANALYSIS OF VARIANCE**

The essence of qualitative methods of analysis ANOVA.

Completely random design in one-way ANOVA. Randomized block design in two-way ANOVA.

Factorial design.

#### **Topic 13: RESEARCH REPORT WRITING**

Types of research reports. Brief reports. Detailed reports. Writing a report: the structure of a research report.

Preparatory section. Main report. Interpretations of results and suggested recommendations.

Writing a report: rules of wording when writing a report. Recommendations for presenting tabular data.

Recommendations for visual representations: graphs.

**Topic 14: ETHICS IN RESEARCH**

The importance of research ethics. Client code of ethics. Researcher code of ethics.

Codes of ethics related to respondents. Responsibility of ethics in scientific research.

Use of library in scientific research. Use of Internet in scientific research.

**8. Course scheme**

Topic	Number of hours									Control form
	Full-time			Part-time			E-learning			
	Lectures	Seminars /practical	Individual work	Lectures	Seminars /practical	Individual work	Lectures	Seminars /practical	Individual work	
<b>Module # 1</b>										
Topic 1. Managerial Accounting: An Overview	2	2	7	1	1	10	1	1	10	IA, S, T, CS, P, E
Topic 2. Managerial Accounting and Cost Concepts	2	2	7	1		9	1		9	IA, S, T, CS, P, E
Topic 3. Job-Order Costing	2	2	7	1	1	10	1	1	10	IA, S, T, CS, P, E
Topic 4. Process Costing	2	2	7	1		10	1		10	IA, S, T, CS, P, E
Topic 5. Cost-Volume-Profit Relationships	2	2	7	1	1	9	1	1	9	IA, S, T, CA, CS, P, E
Topic 6. Variable Costing and Segment Reporting: Tools for Management	2	2	7	1		9	1		9	IA, S, T, CA, CS, P, E
Topic 7. Activity-Based Costing: A Tool to Aid Decision Making	2	2	8	1	1	9	1	1	9	IA, S, T, CA, CS, P, E
Topic 8. Profit Planning	2	2	7	1		9	1		9	IA, S, T, CA, CS, P, E
Topic 9. Flexible Budgets and Performance Analysis	2	1	7	1	1	9	1	1	9	IA, S, T, CA, CS, P, E
Topic 10. Standard Costs and Variances	2	1	7	1		9	1		9	IA, S, T, CA, CS, P, E
Topic 11. Performance Measurement in Decentralized Organizations	2	1	7	1	1	9	1	1	9	S, T, CS, E
Topic 12. Differential Analysis: The Key to Decision Making	2	1	7	1		9	1		9	IA, S, T, CA, CS, P, E

Topic 13. Capital Budgeting Decisions	2	1	8	1	1	9	1	1	9	IA, S, T, CS, P, E
Topic 14. Statement of Cash Flows	2	1	7	1		9	1		9	IA, S, T, CS, P, E
<b>Total hours</b>	<b>28</b>	<b>22</b>	<b>100</b>	<b>14</b>	<b>7</b>	<b>129</b>	<b>14</b>	<b>7</b>	<b>129</b>	-
<b>TOTAL</b>	<b>150</b>		<b>150</b>			<b>150</b>			<b>150</b>	

**Control form**

- IA – individual assignments
- S – survey
- T – test, mid-term tests
- CA – calculation assignments
- CS – solving case-studies
- P – oral presentation
- E - exam

**9. Individual tasks**

Individual tasks are an integral part of the educational process, as they contribute to the development of analytical skills, creative thinking and independence of students.

<b>Content of an individual educational and research task (educational project)</b>
<p>The individual task consists of three types of questions, task options posted on the moodle platform:</p> <ol style="list-style-type: none"> <li>1. Open question: <ul style="list-style-type: none"> <li>o Requires a detailed, detailed answer based on theoretical knowledge and analysis of additional information.</li> <li>o Tests your understanding of the topic, ability to formulate your own opinions and argue your position.</li> </ul> </li> <li>2. Calculation task: <ul style="list-style-type: none"> <li>o Involves performing certain calculations using formulas or economic models.</li> <li>o Tests knowledge of economic methods and the ability to apply them in practice.</li> </ul> </li> <li>3. Situational task: <ul style="list-style-type: none"> <li>o Presents a real economic problem or case that needs to be analyzed and a solution proposed.</li> <li>o Tests your ability to apply theoretical knowledge to solve practical problems and make informed decisions.</li> </ul> </li> </ol> <p>Requirements for completing the task:</p> <ul style="list-style-type: none"> <li>• Clear structure: Answers should be logically structured, contain an introduction, main body and conclusions.</li> <li>• Argumentation: Each statement must be supported by arguments and references to sources.</li> <li>• Accuracy of calculations: When performing calculations, it is necessary to observe accuracy and use appropriate units of measurement.</li> <li>• Originality: Answers must be your own and contain no plagiarism.</li> <li>• Design: The work must be designed in accordance with the requirements specified on the moodle platform.</li> </ul>

**10. Teaching methods**

In the process of studying the discipline "Entrepreneurship and starting a company", various types of educational activities, teaching methods and technologies are used.

Types of educational activities:

1. Lectures: classes where the teacher presents theoretical and practical guidance material, analyzing the main concepts and tools of marketing.
2. Seminars: interactive sessions in which students discuss topics, analyze case studies, and participate in group discussions that contribute to a deeper understanding of the material.
3. Practical classes: focus on the application of Entrepreneurship tools.

Teaching methods and technologies:

1. Presentations and multimedia materials: the use of slides, videos and graphs, which facilitate the perception of information and make the educational process more visual.
2. Active learning methods: include group projects, discussions, role-playing games, and brainstorming sessions that promote active student involvement in the process.

3. Case method: analysis of real business situations, which allows students to practically apply theoretical knowledge, develop critical thinking and decision-making skills.

Use of information technologies: interactive platforms for learning

### 11. Control methods

Control measures are used to determine the success of training. Control measures include mid-term tests (2) and final control.

Mid-term tests are carried out during practical (seminar) classes and is aimed at checking the level of preparedness of the student to perform a specific task.

The final control is carried out to evaluate the learning results after the end of the study of the discipline (semester control) or modules separated according to the working curriculum.

During the study of this course, the following forms of current control are used: a mid-term tests.

When studying this course, the following form of semester control is used: credit.

### 12. Distribution of points received by students

Evaluation of student learning results is carried out according to the University scale (0-100, taking into account optional tasks - 120 points) and the national scale.

General course evaluation system: Participation in the work during the semester / final credit – 80%/20%

All tasks must be written independently, plagiarism is prohibited, no references or citations are required. The quality and originality of your arguments are evaluated. The assignments should be presented in Moodle.

#### 13.1. Scoring scheme for the course

Type of educational activity	Max score	Max total score
Modules #1 & #2		
Solving case-studies (5 x 5 points)	25	
Calculation assignments (4 x 2,5 points)	10	
Surveys / Test (2 x 5 points)	10	
Oral presentation (2 x 5 points)	10	
Individual work (1 x 10 points)	10	
Mid-term test (2 x 7,5 points)	15	
<b>Total</b>	<b>80</b>	
<b>Semester-module control work</b>		<b>20</b>
<b>Total for the course</b>		<b>100</b>

#### 13.2. Conditions for awarding points

1. Solving case-studies (Maximum Score – 5 Points)

- Completeness of the Solution (2 Points): All stages of the problem-solving process are correctly presented, and all formulas and methods are justified.

- Accuracy of Answers (2 Points): All numerical data and calculation results must be accurate.

- Clarity of Presentation (1 Point): Logical structure of the work, clear presentation of solutions, and correct terminology.

2. Calculation assignments (Maximum Score – 2,5 Points)

- Completeness of the Solution (1 Point): All stages of the problem-solving process are correctly presented, and all formulas and methods are justified.

- Accuracy of Answers (1 Point): All numerical data and calculation results must be accurate.

- Clarity of Presentation (0,5 Point): Logical structure of the work, clear presentation of solutions, and correct terminology.

3. Tests (Maximum Score – 5 Points)

- Number of Correct Answers (5 Points): Students receive 0,25 points for each correct answer (total number of tests per session is 20).

4. Survey (Maximum Score – 5 Points)

- Correctness of Answers (3 Points): Answers to questions must be accurate and correct.
- Coverage of the Topic (2 Points): Answers should demonstrate knowledge of all key aspects of the topic.

5. Oral presentation (Maximum Score – 5 Points)

- Substance (2 Points): Completeness and depth of topic coverage, inclusion of relevant data and examples.
- Visual Presentation (2 Points): Quality of slides, use of graphics, clarity, and aesthetics.
- Communication Skills (1 Point): Ability to convey information to the audience, respond to questions, and engage listeners.

6. Individual Work (Maximum Score – 10 Points)

- Depth of Research (3 Points): Quality of topic analysis, use of various sources of information and literature.
- Structure and Formatting (2 Points): Adherence to formatting requirements, logical structure of the work, correctness of citations.

- Originality and Creativity (2 Points): Presence of personal conclusions, recommendations, and interesting ideas.

- Responses to Questions (3 Points): Engagement in presenting work results, participation in discussions, and feedback.

7. Mid-term tests (Maximum Score – 7,5 Points)

- Number of Correct Answers (5 Points): Students receive 0,25 points for each correct answer (total number of tests per session is 30).

**13.3. Final assessment criteria**

University scale	Ukrainian Grade
90 and higher	excellent
70–89	good
50–69	satisfactory
1–49	unsatisfactory

**14. Methodological provision**

Attention students: all educational and methodological materials (lecture plans and videos, presentations/seminar assignments/case-studies, etc.) are submitted in Moodle Course: Research Methodology (Oleg Evgeniyovich Denysov): [https:// dist.krok.edu.ua/course/view.php?id=2847](https://dist.krok.edu.ua/course/view.php?id=2847)

**15. Recommended literature**

**Basic**

1. John W. Creswell, PhD, Department of Family Medicine, University of Michigan, and J. David Creswell, PhD, Department of Psychology, Carnegie Mellon University (2018) Research design : qualitative, quantitative, and mixed methods approaches / - : Fifth edition. | Los Angeles : SAGE, 432p

**Additional**

1. Deepak Chawla, Neena Sondhi. (2022). RESEARCH METHODOLOGY. International Management Institute (IMI). New Delhi: Publishing House Pvt. Ltd. 284p

2. Gary King, Robert O. Keohane, Sidney Verba (2004) Designing Social Inquiry: Scientific Inference in Qualitative Research -300p.

**16. Additional information on the discipline (educational component)**

Certificates of completion for distance or online courses on the relevant topics may be credited provided that the requirements outlined in the corresponding regulation are met.

**Work program of the discipline:**

Compiled by: Associate Professor of the Department of International Business, doctor of Economic Sciences, Associate Professor Oleg Denysov.

Approved: at the meeting of the Department of International Business (Protocol No. 2 dated September 17, 2024).