

**MINISTRY OF HEALTH OF UKRAINE
ODESA NATIONAL MEDICAL UNIVERSITY**

International faculty

Department of Healthcare Management

**Syllabus of the discipline
« Project management in health care»**

Volume	Total academic hours: 90, 3 ECTS credits. Semester: I. I academic year.
Days, time, workplace	Discipline is carried out according to the approved schedule. Department of Healthcare Management. Odesa, Pastera street, 2A.
Teachers	Head of the department, PhD in Economics, Associate Professor Rudinska Olena Professor of the department, Doctor of Economics, Professor Martyniuk Olena Professor of the department, Doctor of Economics, Associate Professor Borshch Viktoriia
Contact information	Telephone number: Huz Daria, responsible for organizational and educational work of the department +380962228051 daria.huz@onmedu.edu.ua Dergunova Olha, department assistant +380932368307 E-mail: kafedramoz@onmedu.edu.ua Offline consultations: from 13.00 to 15.00 every Thursday Online consultations: from 16.00 to 18.00 every Thursday. The link to the online consultation is given to each group separately.

COMMUNICATION

Communication with students will be carried out in the classroom.

During distance learning, communication is carried out through the Microsoft Teams platform, E-mail and Viber (through the groups created in Viber for each group, separately through the head of the group).

ANNOTATION OF THE DISCIPLINE

The subject of study of the discipline is A set of theoretical and methodological approaches and practical aspects of the formation of a methodology for the development and implementation of a research project in the healthcare system, from the stage of creation and development of a concept to the stage of a finished project, within the established budget and urgent boundaries.

Prerequisites and postrequisites of the discipline (the place of the discipline in the educational program):

Prerequisites: economics of health protection, bioethics, management, medical law, biostatistics, clinical disciplines of the professional direction, philosophy and methodology of scientific and medical education, academic integrity and professional ethics of scientific activity,

methods of contribution at school.

Postrequisites: medical informatics and mathematical statistics, oratory skills of a scientist, medical equipment, mandatory and optional components of in-depth study of the specialty, which involves integration with disciplines and the formation of skills to apply knowledge in the process of further education and in professional activities.

The purpose of the discipline: the acquisition by the applicant of the educational and scientific level of the Doctor of Philosophy of theoretical knowledge, the formation of professional competencies and practical skills in the field of project management, as a paradigm of systemic, process and situational approaches, for the effective use of the acquired knowledge in the process of formation and implementation of a research project in the healthcare system.

Tasks of the discipline:

1. To study of organizational and economic relations that determine the project management procedure as an idea of scientific research in the health care system in accordance with the National Concept for the Development of the Public Health System.
2. To master the basics of the procedure for the origin, development and implementation of the project idea as a topic of research work with its subsequent defense for the degree of "Doctor of Philosophy" and "Doctor of Science" in higher educational institutions.
3. To form skills and abilities of a comprehensive study of the medical services market, the use of knowledge about the marketing planning of projects in the healthcare system.
4. To form skills and abilities for determining the cost of developing and implementing projects in healthcare, as well as a system for monitoring its effectiveness.
5. To form skills and abilities of fundraising and use of resources in project activities, strategic planning and analysis technologies, business planning methods.

Expected results:

As a result of studying the discipline the student must:

know:

- theoretical and methodological foundations of project management, trends in its development in the public sector and its role in ensuring the proper level and quality of healthcare services;
- the characteristic features of projects in the field of health and understand the basics of developing socially important projects, in particular, in accordance with the strategic priorities for the development of the health system at the local and regional levels;
- the essence of innovativeness of development projects in the healthcare sector;
- systems of formation, distribution and development of educational and scientific grants at the national and international level;
- basic foundations of marketing activities and marketing planning of project activities in the healthcare system.
- conditions of participation and technology for preparing a grant application, planning and allocation of resources, control over their use and reporting on grant funds;
- formation of the project structure, project development technology and project quality management system.

Be able:

- to make management decisions on the provision and implementation of project activities of healthcare institutions;
- to own technologies for managing the healthcare system, planning, organizing and monitoring the implementation of the tasks of state, regional, sectoral (intersectoral) programs and projects for the development of the relevant territory or industry;
- to manage the resources of a medical institution from a position of efficiency, plan prices for medical services in healthcare institutions of public and private ownership in the process of formation and development of project activities;
- to determine the effectiveness of existing forms and methods of project management based on the results of the analysis of the research results at the final stages of the project based on

- domestic and foreign experience in the context of European integration;
- to plan and develop competitive strategies for the formation and implementation of a project in the medical services market, including marketing, based on strategic analysis technologies;
- to develop business strategies and business plans for investment and social projects in the healthcare sector.

DESCRIPTION OF THE DISCIPLINE

Forms and methods of teaching.

The discipline will be presented in the form of lectures (4 hours), seminar classes (40 hours), organization of independent work of students (46 hours).

Methods of teaching.

Seminar classes:

- verbal methods: conversation, explanation, discussion, discussion of the acute issues;
- visual methods: illustration (including multimedia presentations);
- practical methods: testing, solving situational tasks.

Independent work:

- independent work with recommended basic and additional literature, with electronic information resources, preparation for practical classes;
- independent performance of an individual task, preparation of a presentation to defend an individual task.

Content of the discipline.

Content module 1.

A system approach to managing project activities in healthcare institutions

Topic 1. The essence of system project management in healthcare

The essence of the concept of project management. The main characteristics of the project distinguish it from other types of work performed in organizations. Prerequisites, sources, causes and key directions of changes in the modern environment of project management. The concept of management-oriented management and healthcare management, their key features and principles of functioning. Features of the development of documents of a strategic nature (strategies, programs, concepts, projects) in the field of healthcare and medical services. System characteristics of the project. System Analysis Methodology Project Management Process Group.

Topic 2. Formation and filling of the project structure using the criteria of WBS and SWOT - analysis

Strategic planning of the project management system. Principles and procedure of SWOT - analysis. Functions, subsystems and methods of project management. Project management subsystems include: management of the scope and scope of work, time, duration, cost, quality, supply, resource allocation, risks and information. Project management methods. Project initiation. Planning the goals of the project. Development of a work breakdown structure (WBS). Confirmation of project goals. Goal change control. Public trait and importance of project structuring. The main tasks of project structuring. Basic approaches to project structuring. Project structuring errors are possible. Combination of project structures. The organizational structure of the project and the cost structure of the project.

Topic 3. Development of a project in the healthcare system, taking into account the SMART criteria and the project cycle.

The concept of the project life cycle and the content of its main phases. Classification of projects depending on the life cycle. Identification of projects according to such characteristics as scale, complexity, implementation period, quality requirements, resource limitation requirements, level of participants, nature of the target task, the main reason for the project. Project initialization: development of the project concept, formation of the project idea, preliminary study of the goals and objectives of the project, pre-project studies of the possibilities of project implementation, final design studies. The structure of the project analysis: technical analysis, commercial analysis, monetary analysis, environmental analysis, organizational analysis, social analysis, economic analysis.

Topic 4. Marketing strategy for research and planning processes for the development and implementation of projects in healthcare.

Organization of work at the stage of project development. General sequence of project analysis. The concept of "project planning" and the purpose of planning. Components of a project planning system. Basic and auxiliary planning processes. Methodological approaches to project planning (principles of project planning). The content of conceptual, strategic and tactical planning. Marketing planning of the life cycle of the project as a procedure for managerial choice. Participants and the cordons of the project. Project life cycle. Project management schemes. The essence of network and scheduling. The concept and expediency of developing a network schedule. Methods of calendar respect. Network diagrams: the main goal and tasks of development. Basic principles of construction and differences between lancet graphs and precedence graphs. Types of logical connections in network diagrams. Construction of conditional diagrams. PERT system. Methodology for calculating network schedule parameters: early and late start and finish dates, determination of the critical path, critical and non-critical activities, time margin for non-critical activities.

Topic 5. Management of risks, contingencies and project processes in the healthcare system.

Identification of project risks. Project risk assessment. Development of a response to the unpredictable situation of project activities in the health system. Monitoring and control of risks. Evaluation of the effectiveness of projects. Principles for evaluating the effectiveness of projects. Key project performance indicators (net present value, internal rate of return, payback period, profitability index), their advantages and disadvantages. Determination of the risk leveling strategy for the project.

Content module 2.

Organization of project management in scientific and practical research

Topic 6. Formation of the organizational structure of project activities.

Organizational structure of project management. Features of human resource planning. Project environment. Characteristics of the external and internal environment of the project. The concept and main characteristics of the project team, approaches to its formation. Factors of formation and development of the project team. Basic approaches to team building. Project organization planning. Influence of the structure of the organization on the effectiveness of the project. Appointment of project personnel. Planning the interaction of the project team. Distribution of information flows in the project team. Accounting for the performance of duties and tasks in the team. Administrative completion of the project. The main parameters according to which the decomposition of the project can be carried out: product components, process or functional elements of the organization's activities; project life cycle stages; divisions of the organizational structure; geographic location. Methodological bases for project structuring. Rules and main stages of structuring.

Topic 7. Methodology for the development of the project team and conflict management.

The composition of the project participants. Factors affecting the composition of participants. Leadership and leadership in a team. Staff motivation. The concept and main provisions of modern theories of motivation. Development of the project team. Modern approaches to generating ideas. Brainstorming as a procedure for collective creativity. Brainstorming definition, steps, benefits. Rules for conducting and conditions for using different approaches to generating ideas. Conflictology in project management. Functional approach to conflicts. Convergent approach to conflicts. An evolutionary approach to conflict. Analysis of the professional competencies of team members for the development of software projects and effective team building. Scientific project conflict management. Planning, management, analysis, response and monitoring of conflicts in the project.

Topic 8. Financing of projects, fundraising and formation of business relations with sponsors of scientific projects in the healthcare system.

Essence, principles and main concepts of fundraising. Fundraising activities and forms of

its support. Funds and grants Definition of a fund. Experience and prospects for the development of fundraising. Planning of fundraising activities. Business (commercial) relations with sponsors during the fundraising period. Donors and how to interact with them. Donor classification. Types and principles of business relations. Fundraising budget and results. Fundraiser's main methods of work. Definition of the function of fundraising and its basic concepts. Principles, tasks, methods of activity. Donors and how to interact with them. Rules for success and reasons for failure.

Topic 9. The cost of a project idea-medical service and the methodology for calculating the cost of medical services.

Project costs, their classification. Project estimates and budget. Organization of material and technical preparation of the project. The purpose of project cost planning. The composition and methodological bases for planning the expenses of the period (administrative, marketing and other operating expenses). The concept of the cost of design work, its composition by economic elements and costing items. Method of step-by-step distribution of costs (step down). Guidelines for the calculations reflected in the calculation of the cost of the planning object. Project resource planning. Estimating the value of transactions. Development of the project budget. Analysis of project resources. Project budget control.

Topic 10. Project quality management. Controlling. Reporting Certification.

Quality assurance in project management. Types and methods of property control. Project quality management system (taking into account ISO-9000 standards). Comprehensive product quality assurance system. The modern concept of TQM quality management. The essence of project quality management and methods for ensuring project properties. Method of system quality management. Unified scheme for the development and implementation of the TQM system. Project quality assurance costs. information costs. The process of structuring a property function. Current quality management. Statistical methods of property control. Control cards. Monitoring the effectiveness of project implementation. Essence, purpose and types of project control. Project implementation control methods. Forecasting the final costs and project completion date. Project reporting. Manage and control project changes. Monitoring the implementation of calendar plans and budgets of departments. Control of time and cost of work. Relative characteristics of work performance. Reporting in the control system: tasks, principles of construction, presentation form. Measurement and analysis of project performance characteristics. The main options for action in case of project deviations from the plan (finding alternative solutions, reviewing the cost, timing, scope of work, terminating the project). Product certification as a result of the project idea. Essence, purpose and types of certification. Methods and stages of certification. The concept of norms and standards. International Organization for Standardization. ISO standards system. Ukrainian system of norms. Product certification. Foreign certification system. Work on the preparation and certification. Certification procedure. Objects of certification activity. Technical inspection at the place of work.

Topic 11. Organization of the presentation and defense of the project. Final lesson.

Creating a project portfolio for presentation: A description of the problem the project aims to solve. Determination of the purpose, task, subject and object of the postgraduate project. Determining the boundaries of the external and internal environment of the project. Determining the scientific and practical novelty of the project within the framework of the selected study. Expected results/changes during the formation and implementation of the project. Experience in implementing similar projects. Positioning the project as an individual scientific activity. Publication of research results. Protection of an individual project.

Recommended literature

Basic:

1. Andrienko O. Project management in business associations of small and medium-sized enterprises: manual Kyiv: 2017. 77 p.
2. Blaga N.V. Project management: manual Lviv: Lviv State University of Internal Affairs, 2021. 152 p.
<http://dspace.lvduvs.edu.ua/bitstream/1234567890/3870/1/%D0%B1%D0%BB%D0%B0%D>

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BF%D1%80%D0%BE%D1%94 %D0%BA%D1%82%D0%B0%D0%BC%D0%B8.pdf
3. Biryukov V.S. "Quality management systems and audit in healthcare institutions (theory and practice of industrialization of medical activities)". 2016. Kiev: Education of Ukraine. 334 p. ISBN 978-617-7241-74-3.
 4. Burimenko Yu. I., Galan L. V., Lebedeva I. Yu. et al. Project management: textbook. allowance. / ed. Yu. I. Burimenko. Odessa: ONAZ im. O. S. Popova, 2017. 208 p.
 5. Lekhan V.M. Management of changes in the healthcare system of Ukraine: history and lessons of pilot regions: textbook / V. M. Lekhan, L. V. Kryachkova, V. V. Volchek. - Dnepropetrovsk, 2016. - 53 p.
 6. Methodology for calculating the cost of medical services. Decree of the Cabinet of Ministers of Ukraine dated December 27, 2017 No. 1075
 7. Management and marketing in health care: electronic teaching aid / V.I. Borsch, O.V. Rudinskaya, N.L. Kusik. Odessa: ONMedU, 2022. (Russian and English)
 8. Mikityuk P. P. Project Management: Textbook. settlement [for stud. higher textbook zakl.]. Ternopil, 2014. 270 p.
http://dspace.wunu.edu.ua/retrieve/19680/03_%D0%9D%D0%B0%D0%B2%D1%87%D0%B0%D0%BB%D1%8C%D0%BD%D0%B8%D0%B9%20%D0%BF%D0%BE%D1%81%D1%96%D0%B1%D0%BD%D0%B8%D0%BA.pdf
 9. Petrovich I.M., Novakovsky I.I. Project management: textbook Lviv: Lviv Polytechnic Publishing House, 2018. 396 p.
 10. Project and Risk Management: Textbook. Nizhyn: Publisher ChP Lysenko M.M., 2019. 196 p.

Additional:

1. Bushuev, S.D. Project Management: Fundamentals of professional knowledge and a system for assessing the competence of project managers: National Competence.
2. Kogon K. Project Management / Corey Kogon, Suzette Blakemore, James Wood//, 2018. 240 p. Internet resource: <https://www.yakaboo.ua/upravlenie-proektami-1639980.html>
3. Management and administrative management: textbook / O.A. Martynyuk, N.I. Serebryanikov. - Odessa: Publishing house "Helvetika", 2017. - 540 p.
4. Martynyuk O.A. Kurdybanskaya N.F. Implementation of a quality management system in medical institutions. Black Sea economic studies. 2016. - No. 6. pp. 75-79.
5. Guidance to the code is known to the project management (PMBOK Guide) / team of authors Project Management Institute, PMI. Sixth edition. Project Management Institute, 2017. 800 p.

Electronic information resources:

1. World Health Organization. URL: www.who.int/ru/index.html.
2. European Regional Office of the World Health Organization. URL: www.euro.who.int.
3. Modern healthcare. URL: <https://www.modernhealthcare.com/vital-signs-healthcare-blog>
4. Health Strategy. European Commission: official web-site. URL: <https://ec.europa.eu/health/policies/background/review/strategy>
5. American college of healthcare executives. URL: <https://www.ache.org/>
6. The New England Journal of Medicine. URL: <https://www.nejm.org/about-nejm/products-and-services>

EVALUATION

Methods of assessment of current control:

- oral control: individual survey on the theme;
- written control: assessment of the solution of situational tasks, assessment of the performance of an individual task;
- test control: assessment of performance of tests on the theme.

Criteria of ongoing assessment at the practical class

Score	Assessment criterion
Excellent «5»	<p>The student participates actively in the practical class. He/she demonstrates profound knowledge and provides full and detailed answers. He/she participates actively in discussing problem situations. He/she uses additional educational and methodological and scientific literature. The student knows how to form his attitude to a certain issue and conveys his/her attitude to the issue, gives appropriate examples. He/she knows how to find the most adequate forms of conflict resolution.</p> <p>The tests are completed in full, all 100% of the answers are correct, the answers to the open questions are complete and justified.</p> <p>The student freely solves situational tasks (including calculations), confidently demonstrates practical skills on the theme of practical class and correctly interprets the data obtained. He/she expresses his own creative opinion on the theme, demonstrates creative thinking.</p>
Good «4»	<p>The student participates in the practical class. He/she have mastered the material of the practical class and shows the necessary knowledge, but answers the questions with some mistakes. He/she participates in discussing problem situations. He/she uses the basic educational and methodological and scientific literature. The student expresses his own opinion on the theme of practical class.</p> <p>The tests are completed in full, not less than 70% of the answers are correct, the answers to the open questions are generally correct, but there are some mistakes in definitions.</p> <p>The student correctly solves situational tasks (including calculations), but admits minor inaccuracies and demonstrates more standardized practical skills on the theme of practical class with correct interpretation of the received data. He/she expresses his own opinion on the theme, demonstrates creative thinking.</p>
Satisfactory «3»	<p>The student sometimes participates in the practical class. He/she partially intervenes and asks questions, answers the questions with mistakes. He/she passively works in practical exercises. He/she demonstrates fragmentary knowledge of the conceptual apparatus and literary sources.</p> <p>The tests are completed in full, not less than 50% of the answers are correct, the answers to the open questions are illogical, with obvious significant errors in definitions.</p> <p>The student does not have sufficient knowledge of the material to solve situational problems (including calculations). He/she uncertainly demonstrates practical skills on the theme of practical class and interprets the data with significant errors, does not express his/her opinion on the topic of the situational problem.</p>
Unsatisfactory «2»	<p>The student does not participate in the practical class, just observes the learning process. He/she never speaks out or asks a question. He/she is disinterested in</p>

	the study of the material. The student gives incorrect answers to questions, demonstrates poor knowledge of the conceptual apparatus and literary sources. The test has not been completed. The situation task has not been completed.
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Forms and methods of final control: залік.

Credit is awarded to a candidate who has completed all the tasks of the working program of the discipline, actively participated in practical classes and has a grade point average of at least 3.0 and has no academic arrears.

Opportunity and conditions for receiving additional (bonus) points: not provided.

INDEPENDENT WORK OF STUDENTS

Independent work:

- independent work with the recommended basic and additional literature, with electronic information resources, preparation for each practical lesson;
- independent performance of an individual task, preparation of a presentation to defend the individual task.

Criteria of assessment of the individual task

Score	Assessment criterion
Excellent «5»	Individual task and presentation have been made independently and are original. Their design meets the requirements. The business plan of the public (private) medical clinic is fully developed according to the proposed structure. The analysis is thorough and independent. The student is free to present the material. The content of the presentation is not overloaded with textual slides. The student formulates solid independent judgments supported by factual evidence and calculations. The data on the slides is presented mainly schematically using independently developed schemes, drawings, graphs, contains references to sources that are respectively designed and relevant. The student actively participates in the assessment of the business plan of competitors and is able to critically analyze it.
Good «4»	Individual task and presentation have been made independently. Their design meets the requirements. The business plan of the public (private) medical clinic is fully developed according to the proposed structure, but with some deviations. The analysis is carried out independently, but contains minor inaccuracies; the applicant explains the material well, formulates independent conclusions. The data in the presentation is presented primarily using self-developed schemes, drawings, graphs, contains references to sources that are appropriately designed and relevant. The student participates in the assessment of the business plan of competitors, but is not fully able to critically analyze it.
Satisfactory «3»	Individual task and presentation have been made independently. Their design meets the requirements with minor violations. The business plan of the public (private) medical clinic is partially developed according to the proposed structure. The analysis is only theoretical, descriptive and containing inaccuracies. The student explains the material unsure, formulates only general conclusions (or cannot formulate them at all). The data in the presentation is provided with reference to sources, but they are designed with errors. The student takes a passive part in assessment of the business plan of competitors, is not able to critically analyze it.
Unsatisfactory «2»	Individual task has not been completed. Individual tasks and presentations, which are not performed independently or borrowed from the Internet, shall not be taken into consideration.

POLICY OF ACADEMIC DISCIPLINE

Deadline and recompilation policy:

• Absences from classes for unexcused reasons are worked out according to the schedule of the teacher on duty.

• Absences for an important reason are worked out according to an individual schedule with the permission of the dean's office.

Academic Integrity Policy:

It is compulsory for applicants to follow academic integrity:

- independent performance of all types of work, tasks, forms of control, provided by the working program of this academic discipline;
- reference to the sources of information when using ideas, developments, statements, information;
- compliance with the legislation on copyright and related rights;
- providing reliable information about the results of own educational (scientific) activity, used research methods and information sources.

It is unacceptable for participants in educational activities to use kinship or service connections to obtain a positive or higher grade in any form of control over learning outcomes or an advantage in academic work:

- the use of kinship or service connections in order to obtain a positive or higher grade in any form of control of learning outcomes or an advantage in academic work;
- the use of forbidden supporting materials or technical means (cribs, notes, micro-headphones, phones, smartphones, tablets, etc.) during the control activities;
- the passing of control procedures by fictitious pers.

Applicants may be held academically liable for a breach of academic integrity:

- lowering the assessment results of individual examination, test assignments, assessment of solving situational tasks, completing individual assignments, pass-fail, etc;
- repeated passing of the assessment (test tasks, situational tasks, individual task, pass-fail assessment, etc.)
- assigning additional control measures (additional situational tasks, individual tasks, tests, etc.)
- carrying out additional checking of other works of authorship of the offender.

Attendance and lateness policy:

Health condition: students suffering from acute infectious diseases, including respiratory diseases, are not allowed to attend the lesson.

Being late for class is not allowed. A student who is late for a lesson may attend it, but if the teacher put "absent" in the journal, student must work it out in the general order.

Use of mobile devices:

The using of mobile devices is forbidden. If a student does not follow this requirement, he/she must leave the class and the teacher put "absent" in the journal, which student must work out in the general order.

Mobile devices may be used by students with the permission of the teacher if they are needed for the assignment.

Behaviour in the classroom:

The behaviour of students and teachers in classrooms must be working and calm, strictly in accordance with the rules established by the Regulations on Academic Virtue and Ethics of Academic Relations at Odesa National Medical University, in accordance with the Code of Academic Ethics and University Relations Identification of academic plagiarism in research and educational work of higher education students, researchers and teachers at Odesa National Medical University.