

Fundamentals of Project Management

COURSE SYLLABUS

Code and name of specialty	073 – Management	Institute	Institute of Education and Science in Economics, Management and International Business
Program name	Management of Organizations and Administration	Department	Management
Type of program	Educational and Professional	Language of instruction	English / Ukrainian

LECTURER

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DSc (Economics), Professor of the Management department (NTU “KhPI”). Authored and co-authored over 150 scientific publications. Courses: Performance management, Fundamentals of Project Management, Team Management Tools, Leadership

GENERAL DESCRIPTION OF THE COURSE

Summary	The course is devoted to the development of project management technologies, the acquisition of proper practical skills and skills for the use of universal tools for the development and implementation of projects in order to achieve effective development of the organization.
Course objectives	<ul style="list-style-type: none"> to form theoretical and analytical knowledge of project management to develop the ability to work with statistical information on project documentation to develop skills to develop and justify managerial decisions to improve the organization and management of projects
Types of classes and control	Lectures, workshops, consultations. The course ends with a final exam.
Term	7

Student workload (credits) / Type of course	5 / Elective	Lectures (hours)	32	Workshops (hours)	32	Self-study (hours)	86
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Program competences	<p>GC12. The ability to generate new ideas (creativity). SC03. The ability to identify prospects of organization development. SC08. The ability to plan the organization activity and to manage the time. SC10. The ability to assess the performed works, to ensure their quality, and to motivate the staff of the organization. SC11. The ability to create and manage effective communication in the process of management. SC12. The ability to analyze and structure the problems of an organization, to form reasonable decisions. SC1.1. Ability to collect and process primary accounting and management information; understand and be able to apply accounting and auditing systems. SC2.1. Ability to collect and process primary accounting and management information in the service sector SC2.2. Ability to formulate the main tasks related to teamwork in IT organizations</p>
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Learning outcomes	Teaching and learning methods	Forms of assessment (continuous assessment CAS, final assessment FAS)
LO 04. To show skills of identification of problems and justification of management decisions.	Interactive lectures with presentations, discussions, practical lessons, teamwork, case study, student feedback method, problem learning	Practical Lessons Assessment (CAS), Problem Letters (CAS), Written Project Protection Exam (FAS)
LO 06. To show skills of search, collecting, and analysis of information, calculation of indicators to substantiate management decisions.	Interactive lectures with presentations, discussions, practical classes, teamwork, case studies, project training	Written Assignment (CAS), Knowledge Assessment in Practical Lessons (CAS), Exam in the Form of Written Project Protection (FAS)
LO 07. To show skills of organizational planning.	Interactive lectures with presentations, discussions, practical classes, project training, teamwork	Written Assignment (CAS), Knowledge Assessment in Practical Lessons (CAS), Online Test (CAS), Exam in the Form of Writing Project Protection (FAS)
LO 09. To demonstrate skills of interaction, leadership, and teamwork.	Research method ("field research"), practical lessons, case method, individual and teamwork	Written Assignment (CAS), Knowledge Assessment in Practical Training (CAS), Data Collection and Reporting on Field Research (CAS), Exam in the Form of Written Project Protection (FAS)
LO 11. To demonstrate the skills of analyzing the situation and communicating in various areas of the organization's activities.	Research method ("field research"), practical lessons, project training, individual and teamwork	Written Task (CAS), Knowledge Assessment in Practical Studies (CAS), Data Collection and Reporting on Field Research (CAS), Project Oral Presentation (FAS)
LO 17. To conduct research individually and/or in a group under the leadership of the leader.	Research method ("field research"), practical lessons, project training, individual and teamwork	Written Task (CAS), Field Research Reporting (CAS), Project Oral Presentation (FAS), Written Project (FAS)
PO2.3. Demonstrate knowledge of project management methodologies; conduct project analysis; define project goals and results	Interactive lectures with presentations, research method ("field research"), practical lessons, project training, individual and teamwork	Written Assignment (CAS), Knowledge Assessment in Practical Training (CAS), Data Collection and Reporting on Field Research (CAS), Exam in the Form of Written Project Protection (FAS)

ASSESSMENT AND GRADING

Ranges of points corresponding to grades	Total score (points) for all types of learning activities	ECTS grading scale	The national grading scale	Allocation of grade points
	90-100	A	excellent	
	82-89	B	good	
	74-81	C		
	64-73	D	satisfactory	
	60-63	E		
	35-59	FX	Unsatisfactory (with the exam retake option)	
	0-34	F	Unsatisfactory (with mandatory repetition of the course)	

100% final evaluation in the form of exam (40%) and current evaluation (60%).
40% exam.
60% current evaluation:
• 20% evaluation of tasks in practical classes;
• 20% written task;
• 20% intermediate control (2 online tests)

Course policy Students are required to attend classes according to the schedule and adhere to ethics of conduct. In case of absence, students will need to complete all tasks to compensate for missed classes. Participation in practical classes requires preliminary preparation and advance processing of all necessary materials for productive discussions during the lesson. Written tasks must be submitted before the deadlines.

COURSE STRUCTURE AND CONTENT

Lecture 1-2	The essence of project management	Workshop 1-2	Role, importance of project management in management activity. Evolution of project management. Features of the project and criteria for determining its purpose (SMART). Varieties, classification and features of projects and programs.	S e l f - s t u d y	Study of materials for the case "Principles of structural decomposition of the project," consideration of the situational task: "Determining the priority of the project depending on the goals and strategic plan of the organization," reading the proposed literature, studying the requirements for the project.
Lecture 3-4	Project management processes	Workshop 3-4	Research of the project life cycle. Development of project specifications and placement.		Characteristics of project environment factors and communication management in the project. Study of materials for the case: "Goals and objectives of different stages of project management." Study of project management software systems.
Lecture 5-6	Subjects of management and organizational structures of project management	Workshop 5-6	Mastering rules building organizational structures of project management. Familiarization with examples of organizational management structures project.		Studying materials for the situational task "Project Office." Description of the project management team and construction of the responsibility distribution matrix in the project in Trello. Business game: "Rules for building an organizational structure of project management for a particular enterprise." Online test.
Lecture 7-8	Managing Project Variable Parameters	Workshop 7-8	The concept and main functions of the project network graphics.		Study of materials on the process of complex development of the project network schedule. Calculation of critical project path, application of evaluation technology and project clarification
Lecture 9-10	Managing project financial parameters	Workshop 9-10	The concept of cost and budget of the project.		Studying materials on different types of project financing schemes, solving the situation problem: "Ways to mobilize financial resources for the project"
Lecture 11-12	Management of qualitative characteristics of the project	Workshop 11-12	Quality planning and quality standards, stages of the quality management process in the project.		Defining the concept of quality and quality management, quality costs and methods of quality assurance and control in a project. Study of the main stages of the quality management process in the project. 14 points of quality by Edward Deming.
Lecture 13-14	Risk management in the project	Workshop 13-14	Tips for methods for identifying, forecasting and assessing risks in the project.		Studying the process of identifying potential risks and developing a risk response matrix. Qualitative risk analysis. Risk response strategies. Risk tolerance.
Lecture 15-16	Audit and completion of work on the project	Workshop 15-16	SWOT-analysis to plan work and to identify the risks of the project.		Study of forecasting and change planning processes. Determination of the accounting and reporting system in the project, as well as the processes of documenting the completed work of the project. Case: "System of performance assessment of the project." Online test.

RECOMMENDED READING

Compulsory

1. Abankwa, D. A., Rowlinson, S. M., & Adinyira, E. (2019). Conceptualizing Team Adaptability and Project Complexity: A Literature Review. *International Journal of Innovation, Management and Technology*.
2. Project Management Institute, Inc. (2018). *A Guide to the Project Management Body of Knowledge, (PMBOK Guide) - Seventh Edition*, Pennsylvania, PMI. Mode of access: <https://www.pmi.org/pmbok-guide-standards/foundational/PMBOK>.
3. Project Management Professionals Certification Center. (2002). *A Guidebook of Pulse of the Profession (2017)*. PMI. [Electronic resource]. – Mode of access: <https://www.pmi.org/learning/thought-leadership/pulse/pulse-of-the-profession-2017>
4. *Pulse of the Profession (2020)*. PMI. [Electronic resource]. – Mode of access: <https://www.pmi.org/learning/thought-leadership/pulse/pulse-of-the-profession-2020>
5. Raconteur, (2017). *Project Management report* [Electronic resource]. – Mode of access: <https://www.raconteur.net/report/project-management-2017>
6. IPMA international project management association [Electronic resource]. – Mode of access: <https://www.ipma.world/>

Additional

1. Краснокутська Н. С., Коптева Г. М. (2021) *Оцінка бізнесу : навч. посібник; Нац. техн. ун-т "Харків. політехн. ін-т"*. Харків : Монограф, 2021. 229 с.
2. Блага Н. В. (2021) *Управління проектами : навч. посібник*. Львів : Львівський державний університет внутрішніх справ, 152 с.
3. Данилюк Т. І. (2017) *Організаційне проектування підприємства: методичні вказівки до практичних занять*. Вид. 2-ге (відредаг. і доповн.). Луцьк : СНУ ім. Лесі Українки, 26 с.
4. *Управління проектами у наукоємному машинобудуванні (2019)* Навчальний посібник / Г. О. Кривов, К. О. Зворикін, С. Г. Кривова. К. : КВІЦ, 224 с .
5. *Стандарти, моделі та методи управління проектами (2012)* підручник / наук. ред. В. В. Пасічник. Львів : Новий світ - 2000, 550 с.
6. *Управління проектами (2017)* навч. посіб.: уклад.: Л. Є. Довгань [та ін.]. Київ: КПІ ім. Ігоря Сікорського, 420 с.
7. Яковенко О.І. (2019) *Управління проектами та ризиками: навчальний посібник*. Ніжен: Видавець ПП Лисенко М.М., 196 с.
8. *Єдиний державний веб-портал відкритих даних. (2020)*. Єдиний державний реєстр юридичних осіб, фізичних осіб-підприємців та громадських формувань. - URL: <https://data.gov.ua/dataset/1c7f3815-3259-45e0-bdf1-64dca07ddc10>

Academic integrity

Students are expected to adhere to the Code of Ethics of Academic Relations and Integrity” of NTU “KhPI”.

The content of this syllabus is consistent with the Fundamentals of Project Management course program.